GOVERNMENT OF CYPRUS

A TEN-YEAR PROGRAMME OF DEVELOPMENT FOR CYPRUS

1946

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A Ten-Year Programme of Development for Cyprus

THE FOLLOWING OFFICIAL STATEMENT was issued simultaneously with the publication of this Development Report :—

" From 1941 until the end of March this year, a period which included the most difficult of the war years, the amount expended on public health, irrigation, water supplies, agriculture and forestry from free grants made by His Majesty's Government under the Colonial Development and Welfare Act totalled £600,000.

A further allocation of £1,750,000 has been made for Cyprus under the new Colonial Development and Welfare Act and shortly the Island may expect to reap the benefits of survey research, higher educational training and other schemes which will be financed from a central allocation for all Colonies.

The Cyprus Government has now published a ten-year development plan the cost of which in round figures is £6,000,000. The plan includes expenditure, amounting to some £700,000, required to complete those projects which were unfinished when the new Colonial Development and Welfare Act came into force.

This is not all, for a recent report on an Island-wide electric light scheme indicates that the scheme if put into effect would require a sum of up to £3,350,000. While it is hoped that the electricity scheme can be reduced in cost the foreseen total of all the development plans including those already under way is over £9,000,000.

Financing plans of this magnitude cannot be contemplated at the moment and in these circumstances it is clear that approval cannot be given now for each and every scheme in the ten-year plan. The plan as a whole must be regarded, therefore, as an ideal to be attained as and when finance permits and policies allow during the next ten years or even longer. Priorities have been drawn up beginning with schemes costing about £4,000,000.

Towards financing this development the Government are considering the possibility of contributions from local revenues and raising loan moneys locally. In this connexion it is to be noted that on the 30th September last the sum of £11,500,000 was on deposit in the banks of the Colony. Apart from the fact that it is in our own self-interest to do so, financial assistance on the scale provided by the Colonial Development and Welfare Act lays on us all the duty of seeing that our own local resources are mobilised to the utmost degree so that a comprehensive plan for the development of the Island can be implemented. There is every reason to believe that the local contribution can be substantial."

COLONIAL SECRETARY'S OFFICE,
NICOSIA, CYPRUS.

October, 1946.

4-23-54 9-1/BR

NOTE.

After completing Chapters II–VII of this Report, Sir Douglas Harris, K.B.E., C.S.I., C.I.E., resigned his appointment as Development Commissioner, Cyprus. The remainder of the volume has been prepared in the Secretariat, each section being subjected to the scrutiny and approval of an informal advisory committee, meeting under the chairmanship of the Colonial Secretary himself, of which the following were members :—

Dr. C. Raeburn, C.B.E., *Water Engineer.*
Mr. C. J. Thomas, *Comptroller of Inland Revenue (now Treasurer).*
Mr. B. J. Weston, *Commissioner, Limassol.*
Mr. A. F. J. Reddaway, *Assistant Secretary.*

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CHAPTER I.

INTRODUCTION.

The task of drawing up a comprehensive scheme of development for Cyprus, covering all branches of the administration, falls into two reasonably well-defined parts. The first part comprises the plans for those departments which are most nearly concerned with general development, namely, the Agricultural, Irrigation, Forest, Medical and Education Departments, Chaps. II–VII. The second part relates to more miscellaneous activities such as harbours, communications, municipal schemes, village improvements, housing, archeology (with special reference to the encouragement of tourism) and others, Chaps. VIII–XIV.

2. The report catalogues and describes those schemes which ought to be implemented within the next ten years if the proper development of the country is to be secured. It was difficult to prescribe any exact condition which must be fulfilled in order to decide whether a scheme should be included in or excluded from the programme. The much abused word "essential" is too narrow since, if the country now manages to subsist without a certain service, its provision cannot fairly be described as essential. On the other hand, "desirable" is much too wide; there are numerous projects which it would be desirable to promote but which must be straightway ruled out on the score of expense. Some half-way house has to be found between essentiality and desirability and for this purpose three tests have been applied to every scheme proposed, namely :—

(*a*) would the non-inclusion of the scheme entail the omission of a service genuinely necessary to the proper development of the country;

(*b*) is the scheme so expensive that its inclusion would entail a disproportionate demand on the funds likely to be available for development purposes;

(*c*) will the scheme involve a residual expenditure, after the expiry of the ten years greater than the ordinary revenues of the Colony are likely to be in a position to defray.

Only schemes in relation to which the answer to question (*a*) was in the affirmative and the answers to questions (*b*) and (*c*) were in the negative have been regarded as eligible for inclusion in the development programme.

3. The result is a programme which, while ruling out anything in the nature of unnecessary or "luxury" services, bears some relation to the financial position of the Colony and which can be continued without any marked break, other than possibly in respect of capital expenditure, should further financial aid not be forthcoming after the end of the decennium.

4. The estimates of expenditure given in the report are based throughout on 1945–46 costs. There are only two figures which could be quoted with any certainty, namely, pre-war rates or those at present obtaining. To base expenditure on pre-war rates would be meaningless, and to have assumed some arbitrary figure lying between pre-war and present rates would have introduced an undesirable element of uncertainty into the estimates. Present rates have therefore been entered in all cases.

CHAPTER II.

AGRICULTURE.

A.—INTRODUCTORY.

Cyprus is a country of unusually diversified agricultural production and, in general, the prosperity of its farmers is not dependent on any one or two crops. This spread of economic interests is of undoubted advantage in providing for the Island's farmers a margin of protection against the effects of gluts and crop failures. From the point of view of development, however, the effect of this diversity is to rule out any possibility of a "grand solution" designed to advance uniformly the whole agricultural practice and economic prosperity of the rural population. Rather, each agricultural activity must be considered in turn and separate proposals formulated in respect of those crops or practices where a worth-while degree of improvement may be expected to result from assistance or encouragement by Government. A scheme of development so framed will not, of course, necessarily comprise proposals in respect of each and every different phase of the Colony's agriculture.

2. The four main agricultural products of the Island are cereals, carobs, vine products, and olives. Of these, cereals and olives fall short of demand for local consumption and enjoy an assured market within the Island. Carobs and the vine products depend for disposal on export markets. Of the remaining agricultural products of the Island, the most important are citrus and other fruits, potatoes, livestock and poultry, cotton, tobacco, silk, and vegetables.

B.—AGRICULTURAL POLICY.

3. The principal aims of the agricultural policy of the Government of Cyprus are four in number, namely, to maintain and improve the productive capacity of the land: to make the country as self-supporting as possible in food and in raw materials for clothing: to provide export surpluses to increase the general wealth of the people: and to secure the orderly and profitable marketing of agricultural produce.

4. The system of agriculture by which it is sought to attain these objects consists of two interlocking and interdependent parts, crop husbandry and animal husbandry. Under this system the land, in addition to providing certain crops for the producer's own use and for sale to non-producers, supplies the food requirements of livestock. The different animals in their turn serve to convert part of the crops, including roughage and by-products, into human food and raw materials for clothing, provide power for cultivation operations and transport, and supply organic manure for the maintenance and improvement of soil fertility and texture.

C.—ORGANIZATION OF THE AGRICULTURAL DEPARTMENT.

5. The Agricultural Department is organized in four divisions, of which two are sub-divided into branches, as follows:—

1. Headquarters Division.
2. Crop Division:
   - (*a*) Crop Husbandry Branch.
   - (*b*) Crop Health Branch.
3. Livestock Division:
   - (*a*) Animal Husbandry Branch.
   - (*b*) Animal Health Branch.
4. Produce Inspection Division.

The general functions of each division and branch and the schemes by means of which it is proposed that these functions shall be extended or their performance improved are described in the paragraphs which follow.

D.—HEADQUARTERS DIVISION.

6. This division needs little explanation. It is under the direct control of the Director of Agriculture and deals with general administrative matters, keeps the department's accounts and records and maintains the departmental library. The Agricultural Chemist, whose services are available to all branches of the department, is attached to this division.

E.—CROP DIVISION.

1. CROP HUSBANDRY BRANCH.

7. The Crop Husbandry Branch maintains a general advisory service to farmers through the medium of its district staff. An Agricultural Officer is stationed in each of the six districts and his subordinates, under the title of Agricultural Assistants, are responsible for agricultural "beats", each including from twenty to thirty villages. It is the Agricultural Assistant's duty to visit every village in his beat once a month, so that every village in the Island comes under the constant surveillance of the Agricultural Department. The staff of the branch also includes a Viticulturist and Wine Expert, who exercises general supervision over all viticultural work throughout the Island, and a Seed Production Officer, who has recently been appointed with a view to the establishment of a seed production industry for the supply to United Kingdom firms of seed grown from stock seeds supplied by them.

8. The branch also maintains the following stations :—

14 nursery gardens devoted to raising fruit and forest trees and vegetable seeds and seedlings for distribution to both farmers and townspeople.

2 olive nurseries, in the Valia and Akapnou Forests, where wild olive stocks are budded *in situ*, the trees being subsequently dug up and distributed to farmers.

14 land utilization demonstrations in different parts of the country, illustrating such soil conservation practices as terracing, the construction of contour banks, contour ploughing, tree planting on steep slopes and gully treatment.

Central Experimental Farm at Morphou, where experimental work is conducted on field crops, the testing of new varieties and the production of high quality seed.

Viticultural Station at Saitta, the work of which includes the study of local and imported varieties of wine, raisin and table grapes, investigations on the methods of cultivation, pruning and grafting of vines and on the control of pests and diseases, and the maintenance of a nursery for the propagation and distribution of cuttings of the best varieties.

Deciduous and Soft Fruit Station at Trikoukkia, which has been established for the introduction, trial and distribution of superior kinds of fruit trees, especially apples, pears, plums, peaches and nectarines, and of soft fruits such as black and red currants, gooseberries, loganberries and strawberries.

(a) *Nursery Gardens.*

9. Of the fourteen nursery gardens mentioned, four were established and are maintained from a grant of £4,800 made under the Colonial Development and Welfare Act (D. 46). This grant allows for the maintenance of the nurseries, at a cost of £400 a year, until the year 1950–51. In view, however, of the increase in the rates both of labour and of material since the grant was approved, the amount allowed is now insufficient and the maintenance of the four nurseries is actually costing about £1,100 a year. Maintenance at this figure will have to continue throughout the decennium, the total estimated expenditure being thus £11,000.

10. In addition to the fourteen nurseries already mentioned it is proposed to establish six more, to be devoted exclusively to the production of olive trees. Of the crops grown in the Island for local consumption, the olive is second only to cereals in importance and, since the local production of oil and olives almost invariably falls short of the local demand, there is an assured market for the produce. The demand for planting material is insistent and the time is coming when the outturn from the Valia and Akapnou Forests will be exhausted ; thereafter these forests must be given time to regenerate themselves before further stocks can be budded. Each of the six new nurseries projected will have an area of between 15 and 20 acres and an outturn of about 10,000 trees per annum. The capital cost of the six nurseries will be about £19,500 and the maintenance charges £6,000 per annum ; receipts will begin to accrue after about six years and by the end of the decennium should cover the cost of maintenance.

(b) *Olive Experiment Station.*

11. With an increased production of olives, there would be a possibility of securing a surplus over local requirements and, given improved methods of cultivation, extraction and refining, of building up an important export trade. To this end it is essential that Government should possess a station where variety trials and investigations on methods of propagation can be conducted, where farming, fertilizer and irrigation experiments can be made, where varieties can be tested for oil yield and where experiments on pickling methods can be carried out. The station would serve also as a centre of instruction and demonstration to farmers.

12. An application for a grant under the Act of £18,000 for the establishment and maintenance until 1950–51 of such an Olive Experiment Station has already been submitted. If the scheme is approved in time, it is hoped that part of the capital cost will be defrayed in 1945–46. The grant applied for to cover the period from 1946–47 to 1950–51 was £12,400; the station will, however, continue to function after the latter year, entailing an expenditure of £16,000 during the decennium.

(c) *Conversion of Vineyards.*

13. Viticulture and the making of wine is another important agricultural industry which Government is doing its best to promote and encourage wherever suitable conditions obtain. Far too large an area is, however, still planted with common local varieties of grapes and a grant of £6,250 has been made under the Act (D. 101) to permit of the payment of bonuses to growers who convert their existing vineyards to superior varieties, either by grafting their vines or by replanting their vineyards. Unfortunately, but little advantage has been taken of this scheme, as the high prices obtainable for common grapes under war-time conditions have made villagers reluctant to put their vineyards out of action for the period of two years necessary for conversion. It is, however, anticipated that, with the restoration of more normal conditions, growers will take advantage of the scheme and it is proposed that £1,000 a year shall be allotted for the purpose throughout the decennium.

(d) *Deciduous Fruit Sub-stations.*

14. Reference has already been made, in paragraph 8, to the deciduous and soft fruit station at Trikoukkia. It is the aim of Government to encourage an increase in orchard cultivation in the hill areas of Cyprus. The market prospects, both within the Island and in neighbouring countries, for such fruit as apples, pears and plums are good, better indeed than for almost any other of the Island's agricultural products. There is an increasing demand for these fruits among the local population, they have always been greatly appreciated by summer visitors to Cyprus, and it is reasonable to hope that, in the future, given a vigorous marketing policy and strict produce inspection, an export trade may be built up to such countries as Egypt and Palestine, where conditions are less favourable for the cultivation of these fruits.

15. A further benefit of orchard cultivation is the exclusion of nomadic goats, which usually follows its introduction. When most of the proprietors of a village have decided to plant their land with trees, they quickly realize the necessity for protection against the ranging herds which may in a short space of time wreck a promising young orchard. The Goats Law of 1913 is available to them for this purpose and during the past few years a belt of "prescribed" villages, from which nomadic goats are excluded as the result of a ballot by the inhabitants, has been gradually created on the north and south sides of the Paphos Forest. These villages, apart from the unquestionable benefit which they themselves derive from the exclusion, provide a valuable buffer for the protection of the Main State Forest.

16. Orchard planting in these villages has gone forward apace during recent years and the main problem which now faces Government is that of meeting the requirements of planting material. The demand for deciduous fruit trees from the Trikoukkia station has already overtaken the possibilities of supply and expansion has therefore become urgently necessary. A scheme to that end (D. 479) has recently been approved under the Colonial Development and Welfare Act; this scheme envisages the establishment of two sub-stations in the Troodos foothills, at Saittas (an extension of the Viticultural Station mentioned in paragraph 8) and at Galata, from which the deficiency of planting material will be met. In addition to the provision of such material, part of the area of the Galata sub-station will be utilized for the raising of olive-trees, the production of vine-cuttings of superior varieties, the production of vegetable seeds and for various other horticultural purposes.

17. The grant of £11,800 approved under the Act was intended to cover capital expenditure to the extent of £5,500 and a recurring charge of £1,050 per annum until the end of 1950–51. It is hoped that the whole capital expenditure will be incurred this year, but the recurring charge will continue throughout the decennium, necessitating a provision of about £11,000.

(e) *Tobacco Cultivation.*

18. Tobacco cultivation in Cyprus has always been an uncertain occupation; although at certain periods extensive cultivation has taken place, the local cigarette industry has consistently rejected Cyprus-grown tobacco and has depended for the supply of its raw material on importation from abroad, chiefly from Macedonia. The Cyprus tobacco grower has thus been forced to rely for the disposal of his produce on overseas demand, and in the result has always been exposed to the danger of a sudden contraction in the export market. Such a contraction took place in the years immediately before the war and tobacco-growing in the Island was practically killed in consequence, the local production falling from 4,085 cwts. in 1933 to a mere 316 cwts. in 1938.

19. During the war, the overseas sources of supply having been cut off, cigarette manufacturers in the Island have had to fall back on local production. Thus stimulated, tobacco cultivation has rapidly recovered and in 1943 production reached 7,000 cwts.

20. It is clearly desirable to prevent reversion to the pre-war state of affairs and to ensure that the Cyprus producer in future obtains a reasonable share in the supply of tobacco for local consumption. The benefit to the producer from an assured internal market is obvious; from the aspect of land utilization tobacco is a serviceable crop requiring careful and intensive farming: and from such technical advice as is available there would appear to be no reason why Cyprus should not produce good tobacco of a quality comparable with that of Macedonia and Turkey.

21. In the light of these considerations there is a strong case for the taking by Government of all possible steps to remove faults in the methods of cultivation practised in the Island and to ensure that the leaf produced is of the best quality obtainable in Cyprus conditions. An application has therefore already been submitted for a grant under the Act to cover the cost of the employment for five years of an expert with a thorough knowledge of the cultivation, manipulation and commercial testing of both yellow-leaf (the Oriental-type of tobacco commonly grown in Cyprus) and Virginia-type tobaccos. It is hoped that by this means the causes of the alleged inferior quality of Cyprus-grown yellow-leaf tobacco will be ascertained and remedied and the potentialities of Virginia-type tobacco cultivation assessed. The cost of the service is estimated at £6,000; it is hoped that the expert may be appointed this year, in which case about £4,800 will fall to be paid during the years 1946–47 to 1949–50.

(f) *Seed Production for Export Purposes.*

22. It has been mentioned in paragraph 7 that a Seed Production Officer has recently been appointed with a view to the production in Cyprus of vegetable and flower seeds for export to firms in the United Kingdom. Climatic conditions are suitable for this purpose and it is hoped that in time a valuable export trade in such seeds may be established.

23. It is the intention that seed production shall eventually be undertaken by the Cypriot farmer, but two factors prevent the immediate attainment of this object. In the first place, experience has shown that seed firms in the United Kingdom are apt to send out varieties which are unsuitable for cultivation in Cyprus; it would probably set back the establishment of the industry for years if such varieties were issued to growers. In the second place, owing to the very high prices which are now being obtained for fresh vegetables, it would at the moment be impossible to interest growers in seed production at the prices offered by the United Kingdom firms.

24. In view of the fact that France and Italy will soon be competing again for the United Kingdom market, Cyprus cannot afford to wait to establish its industry until the local price of vegetables has fallen to the extent necessary to make the local production of seed attractive. It is therefore proposed that Government shall undertake such production in the first instance, using for the purpose some fifty acres of land at the Central Experimental Farm at Morphou and various smaller areas in other places. The most suitable varieties for growth in Cyprus will be ascertained during this period. The scheme will involve capital expenditure of about £4,500 on seed stores, special plant, pumping equipment and the like; the maintenance and working charges will amount to about £4,000 per annum. It is proposed that provision of this amount shall be made for a period of five years, within which time it is hoped that the responsibility for production will have been assumed by the farmers. A certain small loss may be expected during the first year or two, due to unsuitable varieties being grown, but thereafter the undertaking should be a profitable one.

25. It is desirable that the work should start this year, provision being made in 1945–46 for half the capital expenditure and for six months' working expenses. For estimate purposes it is assumed that half the recurrent expenditure to be incurred in 1947–48 and three quarters of that to be incurred in 1948–49 will be recovered by the sale of seeds and that thereafter the scheme will be self-supporting.

(g) *Agricultural Extension Work.*

26. There are three distinct sides to the work of the Crop Husbandry Branch, namely, the investigatory and experimental work, which is directed to the investigation and testing of improved methods of agriculture and of improved varieties of crops, the production work, which aims at producing planting material of these improved varieties for distribution to farmers, and the advisory and educational work which is undertaken with a view to persuading the cultivator to change over from age-long habits and to adopt new and better crops and methods of cultivation. With a highly conservative peasantry, the last mentioned side is one of considerable difficulty, but the value to the country of the other activities of the branch depends largely on its success.

27. The efficiency of this advisory and educational work depends upon two factors, a sufficiency of trained staff and the provision of adequate funds to cover the cost of field trials, demonstrations and the like within the villages. At present about 30 Agricultural Assistants and Foremen are employed for the purpose, to cover whose expenses, other than salaries and travelling, provision has been made in the estimates for 1945 to the extent of £6,300, under the head " Improvement and Protection of Agriculture ". If agriculture is to continue to support the ever increasing rural population of Cyprus (and there are few alternative occupations to which it can turn) better and more intensive cultivation is essential and it is to this end that the irrigation and soil conservation works now being undertaken and in prospect are designed. It is of importance that the advisory and educational services provided by the Agricultural Department should keep pace with these material advances.

28. There are about 650 villages in Cyprus and the work in question demands so much attention and time that it is doubtful whether one man should properly be called upon to deal with more than ten or twelve villages. It is therefore proposed that the number of Agricultural Assistants shall be increased progressively during the decennium by twenty and that each of the twenty men recruited shall be given two years' training abroad, in some country where he can obtain experience of first class farming methods. The cost of such training is estimated at £16,000 ; the cost of the employment of the men on completion of their training will amount, during the decennium, to £12,800. The twenty appointments will be in addition to the four existing appointments mentioned in paragraph 72, for the holders of which it is proposed that similar training shall be provided.

29. Additional provision will be required for propaganda, field trials, farmers' days, agricultural shows and the like and money should also be available to enable selected non-officials, such as Secretaries of Co-operative Societies or Agricultural Clubs, to be given training either at the Agricultural Department's stations or abroad so that they may be in a position to reinforce the efforts of the official staff. A resident of a village can often " put over " an idea to his fellow villagers where the official demonstrator may fail. In particular it is believed that great improvement could be effected in the methods of olive cultivation if, every year, twenty selected cultivators from each of the six districts were given a month's training in the subject at some departmental centre. It is proposed that the provision of about £6,000 now made under the head " Improvement and Protection of Agriculture " shall be increased at once by 50 per cent. and shall be doubled by the end of the decennium, and that a sum of £2,500 annually shall be earmarked for the training of non-officials, £1,000 for general training and £1,500 for special training in olive cultivation.

30. A further matter which is of importance in connection with the development of agriculture is the introduction of modern machinery and implements. For example, the substitution of up-to-date threshing machines for the primitive threshing board and the use of seed cleaning machines are both highly desirable. The difficulty is to convince the farmer of the advantages to be derived from such machinery. For this purpose it is proposed that provision shall be made for the maintenance, at a selected agricultural station, of a standing exhibition of machinery and implements which the department has found to give better results than the local type of implement at present in use. Farmers and representatives of Agricultural Clubs and Co-operative Societies would be able to visit this exhibition, have the machinery explained to them and see it actually in use. The cost of purchasing specimen machinery for demonstration purposes and of maintaining the exhibition would necessitate a provision of about £2,000 in the first year and £1,000 a year thereafter.

31. On this basis, an additional sum of £111,300 will have to be spent during the decennium on extension work. Having regard to the overriding importance of agriculture in the economy of Cyprus and to the fact already mentioned that it is on such extension work that the Agricultural Department must depend for the communication to the villagers of the results achieved by its manifold activities, £11,000 a year can hardly be regarded as an excessive sum to devote for the purpose.

(*h*) *Marketing.*

32. In the case of certain, and those by no means the least important, of the island's crops, the main improvement which is required is in respect of the provision of satisfactory overseas markets. Indeed, in the case of carobs, citrus and, to a less extent, vine products, this question is of overwhelming importance and overshadows the purely agricultural aspect of development. Again, the future of cereal cultivation in Cyprus which is the main activity of the farming community, which predominates throughout the central plain and lowlands, and which takes up fully three quarters of the cultivated land in the Island, must depend on protection against excessive competition from abroad. These and similar problems of general marketing policy are already receiving the active consideration of Government and it is proposed in the near future to establish a new Marketing Department, the functions of which will be to assist in the organization of efficient marketing of agricultural produce within the Island, to encourage co-operative marketing whenever possible, and to facilitate the disposal of Cyprus agricultural produce at favourable prices in

overseas markets. This Department will be advised by a Marketing Board on which the producer and merchant communities will be represented. Since machinery is thus already being set up to deal with all matters connected with the disposal of agricultural produce, it would be out of place to attempt in this report to formulate solutions of the problems of marketing referred to above.

2. CROP HEALTH BRANCH.

33. Two officers are employed in this branch, the Entomologist and the Botanist and Plant Pathologist. The duties of the branch include the maintenance of an advisory and research service on crop pests and diseases, the administration of the regulations and orders designed to prevent the introduction, in plant imports, of such pests and diseases, the supply to farmers of certain insecticides and fungicides not stocked by merchants, the control of the sericultural industry and the development of fisheries.

(a) *Sericultural Station.*

34. The history of the silk industry in Cyprus has been a chequered one. It is not open to question that Cyprus can produce silk of a quality which compares well with any silk in the world; the question is whether continuous production on any considerable scale can be made a remunerative commercial proposition.

35. All silkworm egg producers are licensed and it is a condition of their licence that they must have spent one year at the Agricultural Department's sericultural station to learn the necessary technique. The rearing of the silkworms and the production of cocoons is organized as a cottage industry carried on as spare time employment by peasant women in their own houses or outhouses. A filature for reeling the silk was established near Paphos in 1926.

36. The silk trade of Cyprus includes the export of seed, of cocoons and of factory reeled silk. In pre-war years, the prospects of the last mentioned branch were always precarious owing largely to three factors, the heavy subsidy granted to filatures in France which enabled them to pay higher prices for Cyprus cocoons than the Paphos filature could afford to offer, Japanese competition and the substitution in the world's markets of artificial for natural silk. Consequent on the world slump of 1930–31, the price of silk fell from 28 shillings to 6 shillings a pound and, in spite of efforts made by Government to save it, the filature found itself forced to close down in 1934.

37. With the outbreak of war the silk industry again came into prominence and gave Cyprus the position of being the second most important producer of silk (after India) in the Empire. The filature reopened and the whole production, both of cocoons and of processed silk, has since 1942 been taken over by the Ministry of Supply. In addition, 5,000 oz. of seed were exported in 1943, mainly to Kashmir, and arrangements were made in 1944 to raise 13,000 oz., of which 7,200 oz. were exported.

38. The question of the survival of the Cyprus silk industry after the war will depend largely on the importance attached to the maintenance of an imperial source of supply of raw silk. If it is considered that such a source should be maintained, an imperial market for Cyprus silk must be guaranteed. This will raise questions of high policy, including possibly local restrictions on the free sale of Cyprus silk, protection against subsidized competition, Empire preference and the attitude taken in the post-war period towards Japan.

39. If these questions can be so settled as to ensure a remunerative market for Cyprus silk, steps will be required to reorganize the industry and to improve the methods of production. There is considerable scope in the latter field, but it would be impossible to persuade the villagers to improve their methods unless it can be made obvious to them that it is in their interests to do so. Should such reorganization and improvement be undertaken, it will be necessary to make financial provision for it, but it is still too early to say whether and, if so, when and to what extent such provision will be required.

40. In the meantime, however, merely to meet the existing situation, a properly equipped sericultural station is urgently needed for the breeding of silkworms and for the maintenance of supplies of eggs of high quality strain to replenish rearers' stocks. At the present time this work is carried out in unsuitable rented premises and all mulberry leaves required for feeding the worms have to be bought. It is proposed that the new station shall be situated within the area of the deciduous fruit sub-station at Galata, to which reference is made in paragraph 16, and that the necessary premises shall be erected and a suitable area planted with mulberry trees simultaneously with the establishment of that sub-station. The cost of the sericultural station is estimated at £1,750, and an application for a grant under the Act to meet this cost has already been made. Should the grant be approved, it is hoped that part at least of the cost will be defrayed this year, leaving only about £800 to be incurred during the decennium.

(*b*) *Fisheries.*

41. During recent years increased interest has been taken by Government in the development of both fresh water and sea fisheries. Experts have visited the Island and advised on the subject and an officer of the Agricultural Department was deputed to visit fishery institutions in the United Kingdom. The prospects of rearing carp in artificial ponds are under special examination. A grant of £1,200 (D. 391) has been made under the Colonial Development and Welfare act for the latter purpose ; a consignment of carp fingerlings has lately been received from Palestine and successfully transferred to a "pilot" pond at Syrianokhori. Arrangements are also in train to secure the services of an experienced Fisheries Officer, to be shared between Palestine and Cyprus, and further development will be dependent on his expert advice.

F.—LIVESTOCK DIVISION.

1. ANIMAL HUSBANDRY BRANCH.

42. The Animal Husbandry Branch provides an advisory service for farmers on all matters pertaining to the breeding, nutrition and maintenance of livestock. It takes practical steps to improve the quality of the livestock of the Island by maintaining a main stock farm and seven subsidiary stud-stables in various parts of the country and by stationing Government-owned horses, donkeys, bulls, boars, rams, he-goats and turkeys on loan to farmers. It also pays premiums to owners of selected jack donkeys who undertake to reserve them for donkey breeding. These activities have had a marked effect on the country's livestock, the quality of which has been improved until today it is much superior to that usually found in countries in the Middle East.

(*a*) *Government Stock Farm.*

43. The centre of these activities is the Government Stock Farm at Athalassa, where imported breeds of horses, cattle, pigs, goats and poultry and selected native bulls, donkeys and sheep are reared and whence they are distributed on payment to farmers. Athalassa is only a few miles distant from Nicosia and it was probably this fact which dictated the selection of the site when the farm was established some forty years ago. It has long been recognized that the site is far from ideal for the purpose ; the land is poor, the irrigation facilities are deficient and the farm is incapable of supplying the fodder requirements of the livestock maintained on it. The lay-out is, moreover, inconvenient and some of the buildings are old, dilapidated and unsuitable for the purposes for which they have to be used. The question of moving the farm to a more suitable site has long been under consideration by Government.

44. The main argument against such removal is that of expense. The cost of acquiring a new site at present prices (to make the removal worth while the site would have to consist of first class irrigated land) and of erecting entirely new buildings would be very high, even after allowing for the sale price of the inferior land on which the farm now stands. Having regard to the fact that, in spite of the difficulties mentioned, the farm operates quite reasonably satisfactorily, it is doubtful whether it would be justifiable to incur this large expenditure when money is so urgently required for other purposes. The present site at Athalassa is not without certain advantages. It is conveniently situated for farmers desiring to visit it and it is advantageous to have the services of the Chief Veterinary Officer, who must be stationed in Nicosia, immediately available. Moreover, the farm contains a number of buildings of modern design and good construction and much of the remainder is capable of modernization.

45. It is therefore proposed that the question of the removal of the farm shall be dropped and that it shall be modernized at an estimated cost of about £20,000. It is possible also to improve the water supply, which is definitely deficient. There are almost insuperable difficulties in the way of providing new sources, but a rearrangement of the existing system would enable the present supply to be utilized more economically and beneficially than is now the case. The cost of such rearrangement would be about £3,000, bringing the total cost of the reorganization of the farm to £23,000. This is a very much smaller sum than would be involved in the purchase of new land and the construction of a complete new farm. It must be finally recognized that the Athalassa stock farm can never be a farm in the true sense of the term ; it must be regarded rather as a place for the rearing of animals than as one where the food necessary for their subsistence can be grown.

(*b*) *Larnaca Stud Stable.*

46. As already mentioned in paragraph 42, seven stud stables are maintained by the department in various parts of the country. These vary greatly in convenience of lay-out ; the worst in this respect is that at Larnaca, which is accommodated in a jumble of old Government buildings. This stable, situated as it is in one of the principal towns, reflects discredit on Government and it is proposed that the premises shall be sold and that new stables on a suitable plan shall be built outside the township area. This proposal involves capital expenditure to the extent of about £3,000.

(c) *Purchase of Imported Stud Animals.*

47. An application has already been made for a grant of £4,500 under the Colonial Development and Welfare Act to cover the cost of importing from abroad a number of stud animals, including stallions, cattle goats, pigs and poultry. These animals are required primarily to replace existing aged stock, none having been imported for some years owing to the war, and no new maintenance charges are consequently involved. None of the department's thoroughbred stallions is now less than fifteen years old and new blood is essential if the progress which has been made in recent years in improving the quality of jennets and mules, for which there is a good demand in neighbouring countries, and in producing a supply of horses suitable for riding and farm work in Cyprus is to be maintained. In regard to cattle and pigs, the need for new breeding stock is also pressing in order that too close relationship between progeny may be prevented. The upgrading of local poultry is now largely a question of making available to the villagers in sufficient numbers birds of those imported breeds which experiments at the Athalassa Stock Farm have shown to be best suited to Cyprus conditions. If approval to the scheme is received in time, it is hoped that half the grant may be spent this year, leaving £2,300 to be spent in 1946–47.

48. While the importation of the stock referred to will meet immediate requirements, it will be necessary to make provision for its replacement and replenishment during the later years of the decennium and it is proposed that £1,000 a year shall be allotted for this purpose during the seven years 1949–50 to 1955–56. The total amount to be included in the programme in respect of imported stud animals will thus be £9,300.

(d) *Purchase and Upkeep of Stud Bulls and Donkeys.*

49. A grant of £1,524 was approved under the Act in 1941 (D. 28) to meet expenditure for five years on the local purchase and maintenance of selected bulls and jack donkeys for stud purposes. The final allocation is of £282 (£74 for purchase and £208 for upkeep) in 1945–46 and it is proposed that expenditure at this rate shall continue throughout the decennium. It is further proposed that, with a view to encouraging the breeding of high class donkeys and mules for general use, the scheme shall be expanded and that an additional annual sum of about £350 (£100 for purchase and £250 for upkeep) shall be provided for the local purchase of young jack donkeys and to cover the cost of their maintenance for about two years before they can be used at stud. The cost during the decennium of the scheme, as thus expanded, will be about £600 a year, or £6,000 in all.

(e) *Import of Non-pedigree Cows.*

50. An important question in Cyprus is that of milk production and it is from every point of view desirable that dairymen in the Island should be encouraged to improve the standard of their dairy cattle. With this object it is proposed that Government shall import fifty non-pedigree Dairy Shorthorn cows for sale to dairymen. The cost of such importation is estimated at £3,000, including freight. It is further proposed that, in order to ensure the success of the scheme, Government shall subsidize it to the extent of bearing the cost of freight, recovering about £2,000 as the sale price of the animals.

(f) *Poultry Extension Work.*

51. If transport facilities between Cyprus and the mainland improve, as may be expected, after the war, a fair prospect exists of building up a useful export trade in eggs and poultry. The quality of the local fowls is better than is usual in the Middle East and the demand for Cyprus poultry and eggs in neighbouring countries, particularly Palestine, is high. Even apart from this possibility, it is desirable from the domestic standpoint to effect improvements in methods of poultry rearing in the Island. In the first place, eggs and poultry form an important item in the diet of the Cypriot villager ; each household has its few hens, and anything which will increase their productivity will assist in raising the nutritional standard of the village people. In the second place, poultry rearing is by tradition the almost exclusive concern of the womenfolk and consequently the results of any improvement of methods will be felt and enjoyed by the village women. The women are at present distinctly more conservative and backward than their menfolk and in general represent a deadweight against schemes of betterment which involve a change of their habits and manner of life, but experience has shown that they can be interested in schemes which produce some immediate and tangible benefit to themselves.

52. An application has already been submitted for a grant of £8,000 under the Act to finance a scheme for the improvement of the present primitive and faulty methods of poultry management. It is proposed that a qualified English poultry officer (preferably a woman) shall be appointed for a period of three years to organize the work and to instruct three Cypriot women of the elementary school-teacher class, who in turn will tour the country and give instruction by lectures and demonstrations both to the village women and to the senior classes in girls' schools. It is hoped that one of these three will prove suitable for further training in Great Britain so that she may take charge of the work on the completion of the contract of the English officer. The scheme allows £2,066 for the construction of quarters and teaching accommodation

at the Government Stock Farm; the balance of the grant applied for was to cover the cost of salaries, demonstration units, travelling expenses and training up to the year 1950–51. If approved, the scheme will continue beyond that date and, on the assumption that the personnel will be appointed and the necessary accommodation constructed this year, the provision to be made during the decennium will amount to £8,700.

(g) *Fodder Demonstrations.*

53. The deficiency of good pasture land in Cyprus makes the growing of fodder crops a matter of the first importance to the maintenance of an adequate supply of livestock, and extension work is required with a view to persuading the small farmer to take a greater interest in the subject. For this purpose it is proposed that a small area shall be set aside by the Agricultural Department in each district where the best methods of cultivating and conserving fodder crops will be open to inspection. Various crops will be grown, hay and silage prepared and a few animals kept to provide visual evidence of the efficacy of the work done. A sum of £1,500 a year will suffice for the maintenance of the six plots envisaged in the scheme.

2. ANIMAL HEALTH BRANCH.

54. The main functions of this branch are to control the diseases of animals either by preventive measures or by curative treatment, to arrange for the inspection of livestock intended for export and for the quarantine of imported animals and to superintend meat inspection in the principal towns and health resorts. The work of disease control is carried out through the agency of Stock Inspectors stationed in each district.

55. At the headquarters of the branch in Nicosia there is a veterinary laboratory for routine diagnosis, vaccine preparation and research. There is also a veterinary hospital with accommodation for twelve large animals, enclosures for smaller animals and a quarantine compound for imported dogs. An animal clinic is attached to this hospital.

56. As the result of compulsory inoculation with anthrax vaccine, prepared in the veterinary laboratory at Nicosia, which is carried out annually on about 600,000 animals, the value of the animals which die of this disease is now less than £300 per annum compared with £25,000 before the work began. Bovine tuberculosis and contagious bovine abortion have been successfully eradicated and no cases of sheep pox or goat pox have been observed for many years. The ox warble fly pest has been practically eradicated as the result of an intensive campaign and losses due to internal and external parasites have been considerably reduced by the free issue of drugs for treatment.

G.—PRODUCE INSPECTION DIVISION.

57. The functions of the Produce Inspection Division are twofold: to ensure that exports of certain kinds of agricultural produce are of the standard of quality prescribed for the purpose by Government and to inspect importations of planting material in order to ensure that the provisions of the regulations designed to prevent the introduction into Cyprus of pests and diseases are complied with. The work of this division has effected a considerable improvement in the quality of agricultural exports and the system of inspection affords a guarantee that such exports are of a high standard.

H.—SOIL CONSERVATION AND FERTILITY.

1. SOIL CONSERVATION.

58. A major task which faces the Government of Cyprus is that of initiating and encouraging measures to put a stop to the soil erosion which has already resulted in the almost complete degradation of large areas in the Island and which presents a threat of similar degradation to many others. The importance of this question was stressed by the United Nations Conference on Food and Agriculture, held at Hot Springs, U.S.A., in 1943, which reported that soil erosion, unless checked, constituted the greatest physical danger to the world's food production, that all land in agricultural use or suitable for being brought into agricultural use should be adequately protected from erosion and that the conservation of land and water resources endangered by erosion should be regarded as an obligation of Governments as well as of individuals.

59. There is abundant evidence in Cyprus, both in the hills and on the plains, of serious erosion of all types. There is sheet erosion, which removes a thin layer of top-soil every rain; gully erosion, beginning with innumerable tiny trickles an inch or two deep but continuing until well-defined gullies many feet in width and depth are formed; and riparian erosion, resulting in broad, shingle-filled river courses carving out huge masses of earth from the fields every year as the flood channels swing from side to side. Erosion throughout the ages has caused immense damage to the cultivable lands of Cyprus. In the mountains this is clear from the existence of extensive areas of land, now rocky and waste but still bearing signs of former cultivation, while over substantial areas of the plain sheet erosion is wearing the fields down to the sub-soil, and from the sub-soil down to the parent rock.

60. Both nature and mankind have contributed to this result. The rainfall of Cyprus is of the heavy downpour type and its erosive effect is increased by the fact that the rains follow a long rainless summer, when temperatures run very high and the earth, thus rendered dry, is powdered by the trampling of flocks. The same effect, although in less degree, is experienced when rain falls after a spell of dry weather during the winter season. Measurements of the silt deposited in the Syngrasi Reservoir show that every year a million cubic feet of soil are washed into the reservoir from the eleven square miles of sloping cultivated land which forms its catchment.

61. Reference is made in Chapter IV to the denudation which has been caused in many of the hill areas by the unrestricted cutting and grazing which was practised in the mountain forests in past days. In the result, the absorptive capacity of the mountain catchments has been seriously impaired and the rainfall runs off almost unchecked, to the further detriment both of the catchments themselves and of the land below. In the plains, the land hunger of an ever increasing population is resulting in more and more land being permanently cleared and cultivated, putting an end to the system of bush fallow under which, in days gone by, land went out of cultivation with every decline in population and gave nature a chance to re-clothe the ground, protecting it from erosion and giving the necessary breathing space in which new and fertile soils could develop.

62. It is only in comparatively recent years that serious attention has been paid to this question but already active measures have been taken and many more are in contemplation in the Main State Forests to increase the efficacy of the mountain catchments by gully-plugging, contour terracing, reafforestation and the like. The best means of combating erosion in cultivated land is still under examination and surveys are being made of typical villages, in the mountains, foothills and plains, respectively, with a view to plans being drawn up for their protection. It will not, however, be until work has been actually carried out in several villages under variable conditions that it will be possible to frame any reliable estimate of the ultimate cost of the necessary measures. A very rough estimate places this cost at six million pounds, a figure which, although based on inadequate data, is probably at least of the correct order.

63. There can be no doubt as to the value of soil conservation not only as preventing further damage by erosion but also as increasing the productivity of the land. The benefit accrues, however, directly to the landowner and Government assistance should, it is considered, usually be limited (and, in view of the figure already quoted, must on grounds of financial practicability be limited) to experimental and demonstration work, to works which are at a distance from the land to be benefited and would thus otherwise be "nobody's business," and to works which are required for the benefit of an area and not of a particular individual. In the case last-mentioned, which is the usual case in the plains, there will be little hope of obtaining the necessary concerted action unless Government executes the work and affords some financial assistance towards it. The cost of all work other than that mentioned will have to be met by the villagers themselves.

64. The investigations now in progress in connection with soil conservation are not yet sufficiently far advanced to admit of a ten years' programme of operations being drawn up; what is immediately required is an acceleration and intensification of this work, coupled with the construction, as demonstrations, of conservation schemes in various parts of the country. Sufficient knowledge and experience have already been acquired to enable certain such demonstrations to be undertaken at once with confidence. There is every hope that, as the result of these demonstrations, the interest of the Cypriot peasant-proprietor will be elicited and that he will be prepared to make his contribution, in the form of cash or of labour or of both, to the final solution of the problem. That he is already erosion-conscious is shown by the prevalence of terracing where adequate supplies of suitable stone are available to construct the terraces. But one of the most distressing features of erosion in Cyprus is the failure of the farmers even to keep in repair the works built by earlier generations. This is sometimes the fault of the owner of the property, but in the majority of cases the breakdown of anti-erosion works can be traced to damage by waters concentrating outside the property and beyond the individual's control. In short, the good work of one owner is brought to nought by the neglect of his neighbours.

65. Soil conservation demonstrations would, however, be useless either for the provision of data for future work or for propaganda purposes unless they were conducted on a large scale, commensurate with the magnitude of the issue, involving the provision of special plant and staff. In most cases, treatment will have to be organized on the basis of entire catchments or sub-catchments, ranging in size from a section of a village's land to areas containing three or four villages. It is therefore proposed that a sum of £200,000 shall be earmarked for this activity during the next five years, £20,000 being allocated for the purchase of the necessary machinery (tractors, graders and the like), £3,000 a year for staff and £33,000 a year for actual works. It is anticipated that, before the end of the quinquennium, contributions will be coming in from land-owners to augment the last-mentioned sum.

66. The sum proposed would probably suffice for the protection of more than 150,000 acres of cultivable land. After five years of experience on this scale not only will a valuable amount of practical protection have been accomplished but Government will be in possession of the information necessary to enable it to

draw up and to assess the cost of a long-term programme of conservation, a programme which must necessarily be conditioned to a large extent by the degree of co-operation shown by the Cypriot farmer. It is therefore proposed to include in the development programme for the time being only the cost of the first five years' operations ; in the light of the experience thus gained, application will be made on the conclusion of this period for further assistance under the Colonial Development and Welfare Act to enable the work thus begun to be continued throughout the decennium.

2. SOIL FERTILITY.

67. Apart from the loss due to erosion, the fertility of much of the soil of Cyprus has been seriously reduced by continuous cropping coupled with the failure to apply to it any compensating quantity of manure or fertilizer. Climatic conditions in Cyprus are such that there is little good natural pasture, and this factor severely limits the number of the larger animals which can be kept and therewith the quantity of manure produced. Manure from folds and stables is inadequate and is seldom properly conserved or prepared, while the deposit left by flocks while grazing on the fields remains for months exposed to a blazing sun under the worst possible conditions for the retention of its valuable properties. The possibility of using town refuse has also been considered but, while some advance in this direction may be possible, the amount available would in any event be insufficient materially to affect the problem. There is need, therefore, for a much greater use of artificial fertilizers than has been customary in the past. Apart from the restoration of essential chemicals to the soil, experiment has shown that, by increasing the amount of residual organic material such as stubble, which is subsequently ploughed into the ground, artificial fertilizers can play an important part in increasing the production of humus.

68. The cost of fertilizer has risen, during the war, to seven or eight times its pre-war price and it has become extremely difficult in consequence to secure its use on cereal land; an attempt made last year to do so by selling fertilizer to farmers at a little over half the price of its importation met with only moderate success, the farmers arguing that, even when subsidized to that extent, its use was unremunerative. It is probable that, so long as war-time prices prevail, no subsidy which could be considered would result in materially increased use, but there may well be a case, if the price falls, as it is expected to do, but still remains considerably above the pre-war level, for the grant of a subsidy sufficient to make the employment of artificial fertilizer attractive. Such a subsidy would be justified in view of its effect as reducing the deterioration in the fertility of the soil.

69. It is impossible to estimate what the cost of such a subsidy would be. There will always be two variables to be considered, the cost of the fertilizer and the selling price of the crops produced, and these may well vary from year to year ; the justification for and the amount of the subsidy would vary accordingly. The most that can be said is that it would be highly advantageous were the quantity of fertilizer used in pre-war days increased fivefold and that the provision of the funds necessary to achieve such increased use may have to be faced during the decennium.

I.—TRAINING AND EMPLOYMENT OF AGRICULTURAL STAFF.

1. TRAINING.

70. The Department of Agriculture is understaffed in certain of its branches, more especially the Animal Husbandry Branch, and it is the intention that gradually, during the decennium, the establishment shall be brought up to the necessary strength. It is highly desirable, on both political and economic grounds, that the holders of the additional posts to be created shall be Cypriots ; there is, however, no opportunity in Cyprus for the acquisition of the initial training which such holders must have had if they are adequately to perform their duties. It is therefore proposed to select a number of Cypriot youths and to send them abroad for training at Government expense.

71. The posts to be created, the pay which they will carry and the period of training which it is considered that the holders should have undergone are shown in the table below :—

Post.	*Pay.*	*Period of Training. Years.*
Crop Husbandry Branch.		
6 Inspectors of School Gardens	£120—6—150	One
1 Officer-in-charge, Olive Experiment Station	£120—6—150	One
Crop Health Branch.		
1 Assistant Entomologist	£250—10—350	Four
Animal Husbandry Branch.		
5 Veterinarians	£250—10—350	Five
1 Animal Products Officer	£150—6—180—10—270	Two
1 Pasture Officer	£150—6—180—10—270	Two
3 Animal Husbandry Officers	£120—6—150	One

72. An application has already been made for a grant under the Act to cover the cost of this training; the scheme submitted further envisages the sending abroad for two years of four youths who will be selected to fill four existing posts of 2nd grade Agricultural Assistant. The grant applied for amounted to £13,500 and was intended to cover the period from 1945–46 to 1950–51. It is hoped that it may be possible to begin the training during the current year; on the other hand, the courses will, in some cases, extend until 1953–54. The expenditure on the scheme which will have to be met during the decennium from 1946–47 to 1955–56 amounts to £15,400. The scheme excludes the training of the twenty additional Agricultural Assistants required for extension work for which it is proposed, in paragraph 28, that special provision to the extent of £16,000 shall be made.

73. It is further desirable that funds should be available to an extent sufficient to enable selected Cypriot agricultural officers already in service to undertake refresher courses abroad and thus to keep themselves abreast of the latest developments in agricultural practice. Such courses would include travel courses in the Middle East designed to widen the experience of junior officers and refresher courses for more senior officers to be undertaken in the United Kingdom, America or South Africa. It is proposed that £1,400 a year (£650 for travel courses and £750 for refresher courses) shall be allotted for this purpose.

2. EMPLOYMENT.

74. Provision will also have to be made to meet the salaries of the officers selected to fill the new appointments referred to in paragraph 71 after the completion of their training. The amount required will rise from £126 (the pay of the Officer-in-charge of the Olive Experiment Station, who will serve for a short period in that capacity before being sent to Italy and other Mediterranean countries for specialized training) in 1946–47 to £3,472 in 1954–55, when the last of the veterinarians will have finished his course and, by increments, to £3,570 in 1955–56. The total amount to be provided during the decennium will be about £19,100.

J.—SUMMARY.

75. Details of the cost of the schemes outlined in this chapter are given in the Appendix which follows. The total expenditure to be incurred on them during the decennium is there shown as amounting to £553,100, but this figure is exclusive of any provision for fertilizer subsidies (paragraph 69), for the reorganization of the silk industry (paragraph 39) or for the cost of soil conservation works after the year 1950–51 (paragraph 66).

AGRICULTURE.

APPENDIX

Expenditure proposed on schemes included in the programme.

A.—BY YEARS.

Year	Crop Husbandry					
	Nursery Gardens					
	Maintenance	Olive Nurseries				
	Recurring	Capital	Recurring	Total	*Less* Receipts	Net Total
	£	£	£	£	£	£
1945–46 ...	1,100	—	—	—	—	—
1946–47 ...	1,100	10,000	6,000	16,000	—	16,000
1947–48 ...	1,100	9,500	6,000	15,500	—	15,500
1948–49 ...	1,100	—	6,000	6,000	—	6,000
1949–50 ...	1,100	—	6,000	6,000	—	6,000
1950–51 ...	1,100	—	6,000	6,000	—	6,000
1951–52 ...	1,100	—	6,000	6,000	—	6,000
1952–53 ...	1,100	—	6,000	6,000	1,500	4,500
1953–54 ...	1,100	—	6,000	6,000	3,000	3,000
1954–55 ...	1,100	—	6,000	6,000	4,500	1,500
1955–56 ...	1,100	—	6,000	6,000	6,000	—
Total 1946–56 ...	11,000	19,500	60,000	79,500	15,000	64,500

Year	Crop Husbandry						
	Olive Experiment Station			Conversion of Vineyards	Deciduous Fruit Sub-Stations		
	Capital	Recurring	Total	Recurring	Capital	Recurring	Total
	£	£	£	£	£	£	£
1945–46 ...	4,800	800	5,600	1,000	5,500	1,050	6,550
1946–47 ...	5,400	800	6,200	1,000	—	1,100	1,100
1947–48 ...	2,600	800	3,400	1,000	—	1,100	1,100
1948–49 ...	—	800	800	1,000	—	1,100	1,100
1949–50 ...	—	800	800	1,000	—	1,100	1,100
1950–51 ...	—	800	800	1,000	—	1,100	1,100
1951–52 ...	—	800	800	1,000	—	1,100	1,100
1952–53 ...	—	800	800	1,000	—	1,100	1,100
1953–54 ...	—	800	800	1,000	—	1,100	1,100
1954–55 ...	—	800	800	1,000	—	1,100	1,100
1955–56 ...	—	800	800	1,000	—	1,100	1,100
Total 1946–56 ...	8,000	8,000	16,000	10,000	—	11,000	11,000

A.—BY YEARS—*continued.*

Year	Crop Husbandry					
	Tobacco Cultivation	Seed Production				
	Recurring	Capital	Recurring	Total	*Less* Receipts	Net Total
	£	£	£	£	£	£
1945–46 ...	1,200	2,300	2,000	4,300	—	4,300
1946–47 ...	1,200	2,200	4,000	6,200	—	6,200
1947–48 ...	1,200	—	4,000	4,000	2,000	2,000
1948–49 ...	1,200	—	4,000	4,000	3,000	1,000
1949–50 ...	1,200	—	4,000	4,000	4,000	—
1950–51 ...	—	—	2,000	2,000	2,000	—
1951–52 ...	—	—	—	—	—	—
1952–53 ...	—	—	—	—	—	—
1953–54 ...	—	—	—	—	—	—
1954–55 ...	—	—	—	—	—	—
1955–56 ...	—	—	—	—	—	—
Total 1946–56 ...	4,800	2,200	18,000	20,200	11,000	9,200

Year	Crop Husbandry					Crop Health
	Agricultural Extension Work					Sericultural Station
	Training of Staff	Employment of Staff	Improvement & Protection of Agriculture	Training of Non-officials	Exhibition of Agricultural Machinery	
	Recurring	Recurring	Recurring	Recurring	Recurring	Capital
	£	£	£	£	£	£
1945–46 ...	—	—	—	—	—	1,000
1946–47 ...	800	—	3,000	2,500	2,000	800
1947–48 ...	2,000	—	3,500	2,500	1,000	—
1948–49 ...	2,400	300	4,000	2,500	1,000	—
1949–50 ...	2,400	600	4,000	2,500	1,000	—
1950–51 ...	2,400	1,000	4,500	2,500	1,000	—
1951–52 ...	2,400	1,400	5,000	2,500	1,000	—
1952–53 ...	2,000	1,800	5,000	2,500	1,000	—
1953–54 ...	1,200	2,300	5,500	2,500	1,000	—
1954–55 ...	400	2,600	6,000	2,500	1,000	—
1955–56 ...	—	2,800	6,000	2,500	1,000	—
Total 1946–56 ...	16,000	12,800	46,500	25,000	11,000	800

A.—BY YEARS—*continued.*

Year	Animal Husbandry					
	Stock Farm	Larnaca Stud Stable	Imported Stud Animals	Stud Bulls and Donkeys		
	Capital	Capital	Capital	Capital	Recurring	Total
	£	£	£	£	£	£
1945–46 ...	—	—	2,200	74	208	282
1946–47 ...	—	3,000	2,300	200	400	600
1947–48 ...	23,000	—	—	200	400	600
1948–49 ...	—	—	—	200	400	600
1949–50 ...	—	—	1,000	200	400	600
1950–51 ...	—	—	1,000	200	400	600
1951–52 ...	—	—	1,000	200	400	600
1952–53 ...	—	—	1,000	200	400	600
1953–54 ...	—	—	1,000	200	400	600
1954–55 ...	—	—	1,000	200	400	600
1955–56 ...	—	—	1,000	200	400	600
Total 1946–56 ...	23,000	3,000	9,300	2,000	4,000	6,000

Year	Animal Husbandry						
	Import of Non-pedigree Cows			Poultry Extension Work			Fodder Demonstrations
	Capital	*Less* Receipts	Net Total	Capital	Recurring	Total	Recurring
	£	£	£	£	£	£	£
1945–46 ...	—	—	—	2,066	1,138	3,204	—
1946–47 ...	3,000	2,000	1,000	—	1,100	1,100	1,500
1947–48 ...	—	—	—	—	1,400	1,400	1,500
1948–49 ...	—	—	—	—	700	700	1,500
1949–50 ...	—	—	—	—	700	700	1,500
1950–51 ...	—	—	—	—	800	800	1,500
1951–52 ...	—	—	—	—	800	800	1,500
1952–53 ...	—	—	—	—	800	800	1,500
1953–54 ...	—	—	—	—	800	800	1,500
1954–55 ...	—	—	—	—	800	800	1,500
1955–56 ...	—	—	—	—	800	800	1,500
Total 1946–56 ...	3,000	2,000	1,000	—	8,700	8,700	15,000

A.—BY YEARS—*continued.*

Year	Soil Conservation and Fertility			Employment and Training of Staff		
	Soil Conservation			Training	Refresher Courses	Employment
	Capital	Recurring	Total	Recurring	Recurring	Recurring
	£	£	£	£	£	£
1945–46 ...	—	—	—	1,475	—	120
1946–47 ...	10,000	36,000	46,000	2,200	1,400	100
1947–48 ...	10,000	36,000	46,000	3,400	1,400	100
1948–49 ...	—	36,000	36,000	3,600	1,400	500
1949–50 ...	—	36,000	36,000	2,900	1,400	1,200
1950–51 ...	—	36,000	36,000	1,500	1,400	1,800
1951–52 ...	—	—	—	900	1,400	2,400
1952–53 ...	—	—	—	600	1,400	2,800
1953–54 ...	—	—	—	300	1,400	3,100
1954–55 ...	—	—	—	—	1,400	3,500
1955–56 ...	—	—	—	—	1,400	3,600
Total 1946–56 ...	20,000	180,000	200,000	15,400	14,000	19,100

Summary.

Year	Capital	Recurring	Total	*Less* Receipts	Net Total
	£	£	£	£	£
1946–47 ...	36,900	66,200	103,100	2,000	101,100
1947–48 ...	45,300	68,400	113,700	2,000	111,700
1948–49 ...	200	69,500	69,700	3,000	66,700
1949–50 ...	1,200	69,800	71,000	4,000	67,000
1950–51 ...	1,200	66,800	68,000	2,000	66,000
1951–52 ...	1,200	29,700	30,900	—	30,900
1952–53 ...	1,200	29,800	31,000	1,500	29,500
1953–54 ...	1,200	30,000	31,200	3,000	28,200
1954–55 ...	1,200	30,100	31,300	4,500	26,800
1955–56 ...	1,200	30,000	31,200	6,000	25,200
Total 1946–56 ...	90,800	490,300	581,100	28,000	553,100

B.—BY SCHEMES.

Serial No.	Scheme	Paragraph of Chapter	Capital	Recurring	Total	*Less* Receipts	Net Total
			£	£	£	£	£
	Crop Husbandry Branch.						
1	Nursery Gardens :						
	Maintenance of Existing Gardens	9	—	11,000	11,000	—	11,000
	Olive Nurseries	10	19,500	60,000	79,500	15,000	64,500
2	Olive Experiment Station ...	11–12	8,000	8,000	16,000	—	16,000
3	Conversion of Vineyards ...	13	—	10,000	10,000	—	10,000
4	Deciduous Fruit Sub-stations ...	14–17	—	11,000	11,000	—	11,000
5	Tobacco Cultivation	18–21	—	4,800	4,800	—	4,800
6	Seed Production	22–25	2,200	18,000	20,200	11,000	9,200
7	Agricultural Extension Work :						
	Training of Staff	28	—	16,000	16,000	—	16,000
	Employment of Staff ...	28	—	12,800	12,800	—	12,800
	Improvement and Protection of Agriculture	29	—	46,500	46,500	—	46,500
	Training of Non-officials ...	29	—	25,000	25,000	—	25,000
	Exhibition of Agricultural Machinery	30	—	11,000	11,000	—	11,000
	Crop Health Branch.						
8	Sericultural Station	40	800	—	800	—	800
	Animal Husbandry Branch.						
9	Government Stock Farm ...	43–45	23,000	—	23,000	—	23,000
10	Larnaca Stud Stable	46	3,000	—	3,000	—	3,000
11	Purchase of Imported Stud Animals	47–48	9,300	—	9,300	—	9,300
12	Purchase and Upkeep of Stud Bulls and Donkeys	49	2,000	4,000	6,000	—	6,000
13	Import of Non-pedigree Cows ...	50	3,000	—	3,000	2,000	1,000
14	Poultry Extension Work ...	51–52	—	8,700	8,700	—	8,700
15	Fodder Demonstrations ...	53	—	15,000	15,000	—	15,000
	Soil Conservation & Fertility.						
16	Soil Conservation	58–66	20,000	180,000	200,000	—	200,000
	Employment and Training of Agricultural Staff.						
17	Training	70–72	—	15,400	15,400	—	15,400
18	Refresher Courses	73	—	14,000	14,000	—	14,000
19	Employment	74	—	19,100	19,100	—	19,100
	Total		90,800	490,300	581,100	28,000	553,100
			Summary.				
	Crop Husbandry Branch		29,700	234,100	263,800	26,000	237,800
	Crop Health Branch..		800	—	800	—	800
	Animal Husbandry Branch		40,300	27,700	68,000	2,000	66,000
	Soil Conservation and Fertility		20,000	180,000	200,000	—	200,000
	Employment & Training of Agricultural Staff		—	48,500	48,500	—	48,500
	Total		90,800	490,300	581,100	28,000	553,100

CHAPTER III.

IRRIGATION.

A.—INTRODUCTORY.

The development of the irrigation resources of Cyprus is in the hands of the Water Supply and Irrigation Department, which was constituted for the purpose in 1939. The activities of this department cover the whole field of water supply: research, irrigation and the provision of water for domestic use, to which has recently been added responsibility for the construction of anti-malarial works. Only those of its functions which are concerned with the development of irrigation facilities are dealt with in this chapter.

2. Prior to the constitution of the department but little had been done to promote irrigation in Cyprus, in spite of the fact that the provision of additional irrigation water was a primary need in the development of the Island's agriculture and thus in the improvement of the well-being of its people. From time to time consultants were engaged to examine and report on the subject, but the schemes proposed seldom advanced beyond the paper stage. A spurt of activity towards the end of the last century resulted in a somewhat grandiose project for the storage of water in the Eastern Mesaoria; insofar as it was carried into effect, it proved a melancholy failure. Of the reservoirs originally planned, only three ever came into serious operation; two of these have since been abandoned as irrigation works and their beds have reverted to agricultural land, while the third is almost wholly ineffective in two years out of five and only partly effective in the other three. There was also, at intervals, a certain amount of large-scale and costly deep-drilling and adit driving, but all without notable result. It was only with the arrival in Cyprus in 1937 of Dr. C. Raeburn, the present head of the Water Supply and Irrigation Department, and the constitution of that department in 1939, that the policy was changed, the search for the big showy scheme which had hampered development for so many years was abandoned and attention was directed to the discovery and execution of small projects designed to make the best possible use of the water available at each individual place.

3. The adoption of this policy has met with marked success. It has already resulted in a large extension of irrigated cultivation which has been invaluable from the point of view of securing increased supplies of locally grown food-stuffs during the war. Indeed, it is hardly too much to say that the construction of works under this policy, largely financed by grants under the Colonial Development and Welfare Act, has at last removed irrigation from among the subjects on which the Government of Cyprus is subject to criticism. Irrigation, as now being supplied, is well understood by the farmers; it gives an instant and continuing return and thus affords a sure and rapid means of improving the well-being of the peasant class. The Water Supply and Irrigation Department has gained the confidence of the people by providing them with irrigation schemes of the kind they want and which they themselves can operate successfully.

4. Irrigation as such is not, of course, any novelty in Cyprus. On the contrary, Cyprus is scored with ancient irrigation works and has been inhabited from remote times by people who have made such use of the water available as their meagre resources permitted and who, incidentally, have in the process acquired *ab antiquo* rights in much of it. The policy now being adopted is thus a continuation rather than a reversal of past tradition. It is true that it aims at the development of new sources of supply but equally it aims at improvement in the utilization of sources already tapped. A survey of perennial sources of irrigation recently carried out showed that probably half the water which might have been beneficially used by existing irrigation works was being lost owing to the inefficient construction of the works collecting it and delivering it to the land. Many perennial sources, moreover, were not being used at all or had gone out of use owing to the inability of the villagers to overcome small engineering difficulties or through their failure to get together to finance the necessary schemes. In the rivers, large volumes of flood water, invaluable for the irrigation of cereals, were being allowed to flow waste to the sea during winter and spring. It is against this state of affairs that the new policy is directed; its primary object is to ensure, by the construction or improvement of intake works and channels and by the introduction of improved methods of irrigation and farming, that the best possible use is made of every drop of water which is or can be made available.

B.—CLASSIFICATION OF IRRIGATION WORKS.

5. Water for irrigation in Cyprus may be classified in three main categories, namely, water applied to the land by direct flow from rivers and springs, water pumped from the sub-soil and water from conservation works. These three categories are dealt with separately below.

1. GRAVITY IRRIGATION SCHEMES.

6. It is on the development of small gravity irrigation schemes, drawing their water from rivers and springs, that Cyprus must primarily rely. Such schemes are of two principal types: those designed for flood irrigation, which are used mainly for cereal cultivation, and those which have a perennial supply

and are thus adapted for the watering of orchards, gardens, potatoes, pulse and all types of vegetables. The flood irrigation works ensure a crop in years of low rainfall and in normal years a yield higher by about 60 per cent. than that obtained from unirrigated land. Works disposing of perennial water are designed either to bring new land under irrigation or (more usually) to extend the area on which such water is at present used; in the latter case it has been found that the area can almost invariably be extended by fifty per cent. and can often be doubled. The great majority of the villages in Cyprus have a river to develop, a spring to tap or an existing irrigation scheme to be improved so that in the end (and in a small island such as Cyprus the end can be seen) practically all the villagers will have received some benefit from the scheme.

7. The works themselves are of the simplest character, such as can be constructed rapidly, almost entirely with local materials, by a local foreman with a minimum of supervision. In the case of flood-diversion schemes, the floodwaters of the rivers are raised by solidly constructed masonry weirs into earth channels, the first sections of which are usually lined. Screw gates are provided to control the entry of the water into the channel and at the end of the first section to allow silt to be sluiced out when necessary. Such schemes each command an area of anything between one and five square miles.

8. The other main type of scheme concerns perennial waters, usually springs. The springs are excavated and covered for protection from flood damage; the water is collected and conveyed by a masonry channel to an irrigation tank capable of holding about eight hours' flow of the spring, thus obviating wasteful night watering. From the tank the water is distributed to the land by lined channels. These schemes serve areas varying from 20 to 150 acres, though there are a few larger ones. The irrigation tanks, which are of pleasing design, form an important village amenity as they are used by the children for bathing.

9. There is yet another type of irrigation work for which there is scope in Cyprus and which is accordingly being developed, namely, that known as the chain-of-wells, a horizontal tunnel driven into sloping ground and ultimately tapping the sub-soil water. The wells, to which this form of structure owes its name, are actually shafts, usually about 50 or 60 feet apart, sunk from the ground surface to the level of the tunnel in order to enable the spoil excavated from the latter to be removed. There are some notable old works of this kind in Cyprus, some of the tunnels being over two miles long. Owing to their length, such tunnels are able to extract useful supplies from geological formations which have a poor yield and would thus give no result if pierced by a single borehole; they are relatively cheap to construct and are within the power of the villagers to maintain.

10. In the earlier years of the constructional programme, schemes of the types above described were financed almost wholly from grants made under the Colonial Development and Welfare Act. As, however, the popularity of and the consequent demand for such schemes increased, it has been found possible to call on all but the very poorest villages for a contribution towards the cost, in the form of work or of a cash payment or of both. The contributions, which are determined by the Commissioner of the District in consultation with the Water Supply and Irrigation Department, vary according to whether the water is seasonal or perennial and range from a sixth to as much, in exceptional cases, as half the cost. Cash contributions are sometimes collected directly by the villagers; in other cases they are found from the proceeds of a three per cent. medium-term loan made to the village by the Public Loans Commissioners.

11. Once a scheme has been constructed, the responsibility for and the cost of its subsequent maintenance are borne by the villagers; its management is conducted under the Irrigation Divisions (Villages) Law, which provides for the constitution of an Irrigation Committee for the purpose with the Commissioner of the District as Chairman. The Committee promulgates rules to govern the working of the scheme and for the assessment of the irrigation fees which finance the service of the loan, if any, and the cost of maintaining the works. In order to ensure that the schemes are managed and maintained on sound lines, they are inspected periodically by the Water Supply and Irrigation Department, a special branch of which has recently been constituted for the purpose.

12. The grants which have already been approved under the Colonial Development and Welfare Act for the construction of minor gravity irrigation schemes are as follows:

Scheme No.	*Scheme*	*Amount.* £
D. 44	27 gravity irrigation schemes	42,000
D. 87	30 gravity irrigation schemes and 35 irrigation tanks	28,730
D. 203	33 gravity irrigation schemes and 94 irrigation tanks	129,600
D. 373	54 gravity irrigation schemes and 50 irrigation tanks	260,950
D. 408	Supplementary grant in respect of schemes Nos. 44, 87 and 203	23,300
	Total	484,580

Of the above schemes, Nos. 44 and 87 have been completed. The existing grants will suffice to cover the years 1945 and 1946. But it is of the first importance both to the economy of Cyprus and to the well-being of its rural population that the operations should continue after the latter year. There is no question that ample scope for similar works will still remain; to mention only a few examples, the big channels in the Western Mesaoria badly require attention and masonry or concrete lining, the improvement of chains-of-wells has hardly been touched, the springs of the Kyrenia hills will well repay the outlay necessary in order to increase the area now irrigated by them, and in the Troodos range there are still innumerable springs to be developed. It is not proposed at this stage to give a detailed list of individual works, as the construction now in progress absorbs the whole time of the staff available, but it is estimated that an expenditure of from £100,000 to £120,000 a year during the years 1947 to 1951, followed by an expenditure of £30,000 a year for several years thereafter, will suffice for the completion of the programme.

13. The relevant statement in the Appendix to this chapter shows the cost of financing the above programme. No firm estimate can at the moment be made of the amounts which will be recovered from the villagers; the figures adopted for the purpose of the statement are conservative since, should there be unemployment and a fall in the price of agricultural produce after the war, it might no longer be possible to obtain recoveries to the extent now being achieved. After deducting recoveries estimated on this basis, a net expenditure on the scheme of £715,000 is envisaged during the decennium.

2. PUMPED IRRIGATION SCHEMES.

(a) *Subsidized Drilling Scheme.*

14. Since 1927 a scheme has been in operation under which, for a payment of £15 plus £5 for transport, Government undertakes to drill a borehole in any reasonable place for the irrigation of private land. This scheme ensures the development of water bearing strata of low and medium yield and has resulted in a large number of bores being sunk in the land of owners too poor to bear the cost themselves and still less able to accept the risk, inseparable from work of this kind, of the bore proving more expensive or less successful than originally estimated owing to the conditions encountered in drilling. In the last eighteen years, 319 boreholes have been sunk under the scheme with a total footage of 54,200 and an estimated available volume of twenty three million gallons a day; the total cost has amounted to about £15,600, of which a considerable proportion has been covered by the sums deposited by the applicants. Once the hole has been drilled, the responsibility for the provision of the necessary pump and motive power rests with the owner.

15. The subsidized drilling scheme has proved to be a most valuable instrument of development and has brought under irrigation considerable areas which would otherwise have remained unirrigated. There is still large scope for further bores and the number of outstanding applications for them is continually increasing; it would have increased more rapidly still had the people seen any hope of the work being done. It is therefore proposed that not only shall the service be continued but that it shall be expanded. The provision made for the purpose in the estimates for 1945 is £3,300; it is recommended that this sum be increased by £4,000 and that a similar addition be made each year in the future. There is reason to believe that the necessary small pumps and prime movers will become available this year.

16. The Water Supply and Irrigation Department possesses five drilling rigs and a further rig has been loaned to it by the Army; these rigs are not, however, used exclusively for the purpose of the scheme, about 500 additional prospecting holes having been drilled. It will be possible, by working extra shifts, to undertake the revised programme with this equipment. But three of the rigs are very old and it is proposed that, as soon as new ones can be obtained, two of them shall be cannibalized to provide spares for the third and two new rigs purchased. A number of drilling tools also require replacement, none having been received since the outbreak of war. The cost of the rigs and replacements will be about £8,000; it is hoped that it may be possible to obtain them in 1946-47.

(b) *Major Pumping Schemes.*

17. There are certain areas in Cyprus which are suitable for irrigation by major pumping schemes. Six such schemes have been investigated, of which much the largest relates to the land bordering on Morphou Bay. These schemes command collectively an irrigable area of over 4,000 acres and involve the installation of engines and pumps totalling about 800 horse-power.

18. The financial practicability of these projects is dependent on four factors, the price of machinery, the price of fuel oil, the cost of labour and the price of agricultural produce, all of which are at present abnormal and unstable. Were the schemes constructed with the price of machinery at its present level and were a fall in agricultural prices to occur, unaccompanied by a corresponding fall in wage rates and the

price of fuel oil, the cost of production might well exceed the value of the crops produced. The risk of failure due to this cause would be increased by the fact that the farmers on the land commanded are accustomed only to winter irrigation and that it will be some time before they acquire the agricultural skill necessary to enable them to make an optimum use of pumped water.

19. In existing circumstances, therefore, the prospects of the schemes are too uncertain to warrant provision for them being made in the development programme. Should there be a fall in the cost of plant and fuel oil after the war sufficient to establish the schemes as economic propositions, the whole matter will require reconsideration in the light of the changed conditions.

(c) *Deep Boring for Artesian Water.*

20. The possibility of securing water for irrigation from deep boreholes in the Mesaoria has been intermittently under examination for the past sixty years, having been first suggested in 1880. It is almost an article of faith with a section of the population that artesian supplies exist and that Government's inactivity in the matter is the only reason for their non-exploitation. Recent examination of the conditions obtaining afford, however, no basis for this belief. It is, in the first place, geologically unlikely that the Mesaoria is underlain by a water-bearing limestone stratum; even if it were so underlain, it is almost certain that the water would be salt. Moreover, the removal of any great draught of such deep seated water, if it exists, would inevitably have the effect of lowering the water level in the Kyrenian hills and thus drying all the present springs. The striking of deep artesian water in the Mesaoria might thus well provide the strange phenomenon of boreholes flowing salt or highly mineralized, while the sweet springs of the hills vanished.

21. In such circumstances, the incurring of the heavy expense involved in sinking a deep bore in the Mesaoria would be quite unjustified. There would be no guarantee as to the depth to which the bore would have to be taken or that the water, even if present, would be struck; drilling into a limestone stratum is largely hit or miss, since a cavity or crevice must be penetrated or a dry hole results. No economic result could in any case be achieved. Even were a water-bearing stratum discovered and in the unlikely event of the water proving to be fresh, all that would be effected would be the emergence in the Mesaoria of the water which now emerges in the form of springs in the hills. The supply of water by rainfall to the Kyrenia hills, which form the only gathering ground for an artesian basin, is limited and the water can only be drawn off in one place.

3. STORAGE SCHEMES.

22. In paragraph 5 of this chapter, water from conservation works was mentioned as one of the categories of irrigation water in Cyprus. There was at one time a widespread belief in the Island that the construction of storage schemes would prove a panacea for all its irrigation difficulties but, here again, there is no foundation for such a belief. Neither the rainfall nor the topography of Cyprus is such as to favour storage.

23. The highest precipitation takes place in the Troodos mountains. This range reaches an altitude of 6,400 feet within seventeen miles of the sea so that the area consists of a steeply sloping terrain with short rivers, flowing in deep canyons, the beds of which have a gradient of not less than one in a hundred. This high gradient rules out the practicability of storage works in the area, since any dams constructed would have to be of enormous and quite uneconomic heights in order to store any appreciable quantity of water. The same remark applies with even greater force to the northern range, the Kyrenia hills, which consist of an almost vertical mass of limestone rising abruptly from the north coast.

24. Conditions are perhaps least unpromising in the eastern Mesaoria, where the reservoirs built at the end of the last century are situated. But two conditions, the low and erratic rainfall and the high proportion of silt carried by the rivers dammed, have proved fatal to their success. One of the reservoirs is now filled in with silt: the second has no water and commands no irrigable land: in the case of the third, which still operates spasmodically, there is no assurance that it will have water in any given year. In the Western Mesaoria, although the rivers have a more regular regime, the slope of the land is twice that of the eastern plain and thus sites which would store reasonable quantities of water are lacking. Moreover, heavy losses would occur from percolation, due to the nature of the sub-terrain.

25. In general, after weighing conditions of rainfall and climate, topography and geology, it may be stated that conservation has no practical application to irrigation in Cyprus.

26. This verdict applies, however, only to storage above ground; experiments are now being made to test the possibility of storing water in winter in underground fissures for use in the dry months. There is evidence that the springs in the limestone are gradually lowering the level at which they emerge and it is probable that, in this process, they leave above them a system of crevices and caverns which have been eroded or dissolved out at the higher levels. In that event it may be possible, by blocking the spring at its point of issue, to back the water into these crevices and caverns and to hold it there for later use. A similar effect might be obtained by lining the tunnel of a chain-of-wells which penetrates impervious rock towards its outlet and by constructing a barrier to the flow of water from it. It is still too early to predict the results of these experiments but, should they be successful, they will afford a further means of improving the material position of the Cypriot peasant proprietor.

C.—RESEARCH.

1. GEOPHYSICAL UNIT.

27. Investigation of sources of sub-surface water in Cyprus are well advanced. Well-drilling logs give records concerning more than eight hundred boreholes and most of the Mesaoria has been covered by geophysical prospecting work. Electrical resistivity methods, closely followed by check drilling, were used for the latter purpose and results were good, aquifers of value being found by this means in both the Eastern and Western Mesaoria. There is, however, need for further electrical resistivity work in the Western Mesaoria, using probes to 300 feet depth, a depth greater than that to which the work has previously extended. It is proposed that, after the war, a geophysical prospecting unit shall be organized to carry out a three-years' programme of investigation into the availability of deeper sub-surface water. It is unlikely that the necessary instruments, which are estimated to cost £2,000, will be available before 1947 and the survey might extend over the years 1947–48 to 1949–50, the running expenses, including salaries and check drilling, being about £4,000 a year.

2. GENERAL PROSPECTING WORK.

28. Since 1937, a grant has been available under the Colonial Development and Welfare Act (D. 86) to cover the expense incurred in general water prospecting work; the salary of the Water Engineer, who is head of the Water Supply and Irrigation Department, is paid from this grant. The present grant of £25,000, which envisages an expenditure of £5,000 a year, expires on the 1st April, 1947. With the extension of the work in new directions and with increasing costs of labour and transport, the amount provided has become insufficient to finance the investigations necessary to ensure parallelism between the research and the construction programme and it is proposed, first, that the provision for such work be increased from £5,000 to £8,500 a year during the years 1945–46 and 1946–47 and, secondly, that provision be made at the latter figure during each of the remaining years of the decennium.

D.—STAFF.

29. For the proper and economical execution of the works included in the programme recommended, an increase in the staff of the Water Supply and Irrigation Department will be required. The following is the additional staff necessary if efficiency is to be secured :—

	£
2 Assistant Irrigation Engineers @ £1,000 p.a.	2,000
Increase in pay of post of Superintendent of Waterworks from £450 to £600 p.a.	150
1 Irrigation Superintendent @ £300—10—350 (Average £335)	335
2 Inspectors of Water Supplies @ £230—10—270 (Average £260)	520
4 Assistant Irrigation Superintendents (1st Grade) @ £180—10—220 (Average £210)	840
10 Assistant Irrigation Superintendents (2nd Grade) @ £150—10—180 (Average £174)	1,740
Total increase per annum	£5,585

The Assistant Irrigation Engineers will be recruited abroad; the pay proposed is intended to cover the whole cost of the appointments, including travelling, leave, etc. The other seventeen appointments can be filled locally. Additional clerical establishment will also be required, but this will be charged direct to the various works.

E.—SUMMARY.

30. The total net expenditure which must be incurred during the decennium in order to give effect to the irrigation programme outlined in this chapter amounts to £917,800, as shown in the Appendix. The sum required is considerable, but its outlay will result in an improvement in the conditions of life of the Cypriot peasantry which will be out of all proportion to the monetary cost of the works proposed.

IRRIGATION.

APPENDIX.

Expenditure proposed on schemes included in the programme.

A.—BY YEARS.

Year	Gravity Irrigation Schemes			Pumped Irrigation Schemes Subsidized Drilling Scheme		
	Capital	*Less* Receipts	Net Total	Capital	Recurring	Total
	£	£	£	£	£	£
1945–46 ...	135,000	15,000	120,000	—	4,000	4,000
1946–47 ...	135,000	15,000	120,000	8,000	4,000	12,000
1947–48 ...	120,000	15,000	105,000	—	4,000	4,000
1948–49 ...	120,000	15,000	105,000	—	4,000	4,000
1949–50 ...	120,000	15,000	105,000	—	4,000	4,000
1950–51 ...	100,000	12,000	88,000	—	4,000	4,000
1951–52 ...	100,000	12,000	88,000	—	4,000	4,000
1952–53 ...	30,000	4,000	26,000	—	4,000	4,000
1953–54 ...	30,000	4,000	26,000	—	4,000	4,000
1954–55 ...	30,000	4,000	26,000	—	4,000	4,000
1955–56 ...	30,000	4,000	26,000	—	4,000	4,000
Total 1946–56 ...	815,000	100,000	715,000	8,000	40,000	48,000

Year	Research				Staff
	Geophysical Unit			General Prospecting Work	
	Capital	Recurring	Total	Recurring	Recurring
	£	£	£	£	£
1945–46 ...	—	—	—	8,500	—
1946–47 ...	—	—	—	8,500	5,100
1947–48 ...	2,000	4,000	6,000	8,500	5,300
1948–49 ...	—	4,000	4,000	8,500	5,500
1949–50 ...	—	4,000	4,000	8,500	5,700
1950–51 ...	—	—	—	8,500	5,700
1951–52 ...	—	—	—	8,500	5,700
1952–53 ...	—	—	—	8,500	5,700
1953–54 ...	—	—	—	8,500	5,700
1954–55 ...	—	—	—	8,500	5,700
1955–56 ...	—	—	—		
Total 1946–56 ...	2,000	12,000	14,000	85,000	55,800

A.—BY YEARS—*continued*.

Summary.

Year	Capital	Recurring	Total	*Less* Receipts	Net Total
	£	£	£	£	£
1946–47 ...	143,000	17,600	160,600	15,000	145,600
1947–48 ...	122,000	21,800	143,800	15,000	128,800
1948–49 ...	120,000	22,000	142,000	15,000	127,000
1949–50 ...	120,000	22,200	142,200	15,000	127,200
1950–51 ...	100,000	18,200	118,200	12,000	106,200
1951–52 ...	100,000	18,200	118,200	12,000	106,200
1952–53 ...	30,000	18,200	48,200	4,000	44,200
1953–54 ...	30,000	18,200	48,200	4,000	44,200
1954–55 ...	30,000	18,200	48,200	4,000	44,200
1955–56 ...	30,000	18,200	48,200	4,000	44,200
Total 1946–56 ...	825,000	192,800	1,017,800	100,000	917,800

B.—BY SCHEMES.

Serial No.	Scheme	Para. of Chapter	Capital	Recurring	Total	*Less* Receipts	Net Total
	Gravity Irrigation Schemes.		£	£	£	£	£
1.	Gravity Irrigation Schemes	6–13	815,000	—	815,000	100,000	715,000
	Pumped Irrigation Schemes.						
2.	Subsidized Drilling Scheme	14–16	8,000	40,000	48,000	—	48,000
	Research.						
3.	Geophysical Unit ...	27	2,000	12,000	14,000	—	14,000
4.	General Prospecting Work	28	—	85,000	85,000	—	85,000
	Staff.						
5.	Staff	29	—	55,800	55,800	—	55,800
	Total		825,000	192,800	1,017,800	100,000	917,800
			Summary.				
	Gravity Irrigation Schemes		815,000	—	815,000	100,000	715,000
	Pumped Irrigation Schemes		8,000	40,000	48,000	—	48,000
	Research		2,000	97,000	99,000	—	99,000
	Staff		—	55,800	55,800	—	55,800
	Total		825,000	192,800	1,017,800	100,000	917,800

CHAPTER IV.

FORESTS.

A.—INTRODUCTORY.

Cyprus in early times was extensively forested and the problems which today confront the Forest Department are due in the main to the uncontrolled deforestation which has been in progress throughout the succeeding centuries. It was, of course, only natural that, during the heyday of the Island's prosperity, much of the original forest should have been cleared for cultivation, for ship-building and for the provision of timber and fuel for copper mining and smelting. There was some economic justification for such clearance but there was none for the denudation which took place during the subsequent era of Turkish rule. Such forests as remained were regarded as no man's land and as open to exploitation by all and sundry without control. They were subjected to unsystematic and wanton cutting, to shifting cultivation and to excessive grazing; at intervals they were ravaged by fires which, once alight, continued until they burnt themselves out. Visitors to the Island at the time of the Occupation eloquently described the sorry state of the forests, the evidence of unrestrained cutting and slashing, trunks lying rotting in chaotic confusion and the gaunt skeletons of fire-wasted wood-lands through which roamed countless flocks of starveling goats. It was against this background that the Forest Law of 1879 was enacted and that a Forest Department, the first to be constituted in the Colonial Empire, was set up to undertake the management of this wasted asset.

2. The original department was organized on a very modest scale and so continued for the next forty years. There were never more than one or two trained forest officers in charge, there were no forest telephones and few forest roads, communications were slow and consequently the day to day administration of the forests devolved largely upon a handful of untrained and sometimes illiterate Cypriot staff. In spite of these disabilities, however, the reservation and delimitation of the forests was completed, a certain amount of afforestation was done and the process of introducing organized forest protection was initiated.

3. It is not surprising that the heavy demands for timber and fuel during the war of 1914–18 found the department unprepared. Resort had to be had to localized and excessive fellings and, in the result, there was serious denudation in the more accessible areas. Further denudation was caused by periodic outbreaks of fire. The imposition of forest control and the restriction of the former free use of the forests resulted in considerable friction between the department and the forest villagers, who gave vent to their dissatisfaction by firing the forests.

4. It was not until 1921, with the appointment of Dr. A. H. Unwin as Conservator, that steps were taken to build up a department in any way commensurate with the value and importance of the forests. Trained forest officers were brought out from England and the calibre of the Cypriot staff was greatly improved, young men of standing and education being selected and sent abroad for training. Properly graded forest roads began to be built and the first field telephone lines appeared. The first inventory of forest stocking was made and in 1930 work on the preparation of working plans began in earnest, marking the beginning of technical forest management on sound, up-to-date lines.

5. Unfortunately, this period was marked by almost incessant friction between the department and the people. Attempts to curtail forest grazing by active policing and frequent prosecutions were met by incendiarism. The restriction of cutting and grazing in the lowland forests and fuel areas was a prime cause of complaint and when, in the early thirties, financial stringency caused the withdrawal of the department to the main forests, the villagers seized their opportunity and, in the space of five or six years, cut, grazed and burned many of these lowland forests and fuel areas almost out of existence.

6. It is only since 1936 that an end has been put to this state of affairs. With this object in view, the State Forests of the Island have been classified as Main State Forests, comprising all the mountain catchment forests and the best of the lowland forests and plantations, and as Minor State Forests, including the lowland scrub forests and certain amenity plantations in the vicinity of towns. The Main State Forests continue to be managed by the Forest Department while the Minor State Forests are controlled either directly by the Commissioner of the District or through the agency of a Village Commission and are managed, in the interests of the villages, as fuel grounds, grazing lands, for leasehold cultivation or for amenity purposes.

7. With the introduction of this system, forest policy underwent some reorientation. Both the people and the forest staff were encouraged in the idea that the forests were held in trust for the benefit of the people of Cyprus rather than as a closed reserve to be defended against all comers at all costs. The fuel ticket

system was introduced so that all might have the chance to obtain fuel legally. Illicit grazing in the more important forests was legalized by the issue of grazing permits and the holders of such permits were regarded as entitled to compensation if their eviction subsequently proved to be necessary. Many abuses still persist and much still remains to be done but in general it may be said that, as a result of the new policy, friction has died away, the forest villagers are now co-operating with the department, which has shown itself capable of providing alternative work for those displaced from their previous occupations, the number of forest offences has decreased rapidly and, most striking of all, incendiary fires have dropped to negligible proportions.

8. In this calmer atmosphere development has proceeded steadily. Working plans have been completed for the Main Paphos Forest, the most important forest in the island, and work is now going forward along the lines thus planned. A net-work of forest roads, to open up the hitherto inaccessible production forests in the mountains, has been constructed. New forest stations, connected to one another and to headquarters by the forest telephone system, have been built, thus enabling more and more of the staff to live actually within the forests. All the main mountain tops are manned in summer by fire look-out posts, equipped with direction-finders and telephones, and fire-fighting technique has been brought to a high state of efficiency. Forest yields are now systematically exploited and steady employment is thereby provided for the forest villages.

9. In the result, the heavy demands made on the department during the present war have caused no major dislocation. Fellings have been extended over all the remaining exploitable areas of forest, but have been spread in such a manner as not to reduce the forest stocking below the accepted minimum density. Nowhere has there been any instance of the clear cutting which characterized former "war-fellings", and, though yields will of necessity be much reduced for some years to come, the forests have not suffered by the extra fellings.

B.—PRESENT POSITION OF THE FORESTS.

10. The State Forests of Cyprus cover an area of 622 square miles. Of this area, some 458 square miles lie within the mountains, the remainder being situated in the lowlands. 536 square miles have been classified as Main State Forest and are managed by the Forest Department; 86 square miles have been classified as Minor State Forest and, as explained in paragraph 6 above, are locally managed.

11. The ravages of fire, coupled with heavy cutting and grazing, have seriously impaired the efficiency of all forests both as catchments for the rainfall and as production areas. It is estimated that in half the area of the mountain forests the paucity of the forest crop results in defective catchment. Only one quarter of the 536 square miles of Main State Forest are now worked as productive forest; the remainder carry too light a crop to warrant systematic exploitation.

12. As a result, Cyprus, which should be more than self-supporting in timber, has in normal times to import two-thirds and more of its timber requirements. In 1938 nearly 34,000 cubic metres of timber were imported as against 10,000 cubic metres produced locally. The extra fellings made since the outbreak of war have reduced the yields available for cutting and for the next few years these yields will not exceed from 3,000 to 5,000 cubic metres annually. Though a steady increase in the annual yield will follow, it will be another fifty years before the State Forests can be expected to supply a substantial proportion of the Island's requirements.

13. The local consumption of wood, burned either as fuel or as charcoal, is estimated at about 150,000 tons. In normal times, about 40,000 tons are taken out of the Main State Forests, the remainder being found from Minor State Forests, bush covered waste or private lands or from the prunings of fruit trees. Even before the war, the yield of fuel available from all sources was inadequate; during the war, fuel cutting has seriously depleted the forests in many areas where demands were heavy and has led to an increasing denudation of bush land. Although the substitution of oil for wood fuel for industry may to an extent relieve some of the present strain on local resources, it is unlikely that oil will ever oust wood from domestic use and, with diminished reserves, the need for the creation of new fuel areas is an urgent one.

C.—AFFORESTATION.

1. MOUNTAIN FORESTS.

14. The main objects of management in all Cyprus hill forests are to preserve and improve the permanent forest cover so as to afford protection against soil erosion, thus ensuring the catchment of rainfall and conserving the water supplies, to provide sustained and increasing yields of timber and fuel for local markets and to utilize to the fullest degree their value for recreation and national amenity. The extent to which the catchment efficiency in the hills has been impaired by past clearance is only too obvious after heavy rain, when the torrents come down in spate carrying with them a full charge of silt scoured from the

slopes above. In the result, many hillsides are now derelict and so eroded that they have little or no absorptive capacity. Other large areas in the forests, which have been subjected to excessive cutting, fires and grazing, have similarly lost to a considerable extent their utility and power for water catchment. The protection of the mountain catchments and the gradual replacement of their forest cover, coupled with the improvement of their efficiency by contour terracing and trenching, is a matter of prime importance since on that efficiency depend the maintenance and enhancement of the water supplies to a large proportion of the irrigation works in the island.

15. The forests have been so denuded and abused in the past that, as already mentioned, today only a comparatively small portion of the total area of the Main State Forests can be described as being in an exploitable condition. Stocking in the remainder is sub-normal and the task of restoring it to full production has now gradually to be undertaken. In some areas this can be achieved by natural regeneration following a lengthy period of rest and careful protection, but in others artificial regeneration is essential if they are to be saved from the destructive forces of erosion which now threaten their final and complete degradation.

16. In 1941, a grant of £210,000 for the reclamation and reafforestation of forest areas in Cyprus was made under the Colonial Development and Welfare Act (D. 45). This grant, of which about £175,000 have been earmarked for expenditure in the mountain forests, was intended to cover operations over a period of ten years and in the years 1941 to 1944 some £82,000 were spent. A provision of £30,000 has been made for the purpose in the estimates for 1945. A great deal of useful work has already been accomplished by means of this grant. About 3,500 acres of bare forest land have been treated and sown up with pine, and much has been done by patch sowings and gully plugging elsewhere to improve areas of partially stocked forest. Satisfactory afforestation techniques have been worked out in connection with the establishment of lowland plantations after a good deal of experimental work, and excellent progress has been made with the elimination of forest grazing in the main forests of the southern range

17. Having regard to the needs of Cyprus in respect both of timber and of fuel, it is most desirable that this work should be not only continued but accelerated. The pace must necessarily be conditioned largely by financial considerations and, having in view this aspect of the matter and also the fact that any rational reafforestation programme must be accompanied by a parallel communications and building programme, it is proposed that the annual expenditure on reclamation and reafforestation work in mountain areas shall be pitched at £30,000 throughout the decennium as compared with rather less than £20,000, the amount available under the existing grant. As shown in the relevant statement in the Appendix to this chapter, a small but increasing revenue from the earlier plantings will begin to be received during the later years of the decennium.

2. LOWLAND FORESTS.

18. Along with reafforestation in the mountains should go the establishment of forests in the lowland areas, these lowland forests being designed primarily for the production on short rotation of fuel, poles and small saw logs. For this purpose it is proposed that about 2,500 acres shall be acquired and planted to quick-growing hard-wood species such as eucalyptus and wattle. The cost of establishing plantations to this extent is estimated at £50,000, which will be spread evenly over the decennium. The scheme will, in time, prove highly remunerative ; an ultimate annual revenue of £20,000 is anticipated, although only a small portion of this revenue will accrue in the decennium during which the plantations are being established

3. VILLAGE FUEL AREAS.

19. A further important need in the same connection is for the establishment of village fuel areas, from which villagers can obtain part of their own fuel requirements. Apart from the value of such areas in meeting this very real need, it is only by the provision of locally grown supplies that the pressure on the main forests can be relieved and depredations prevented. A grant of £50,000 under the Act has already been made for this purpose (D. 102) ; a scheme was envisaged extending over seven years, the expenditure reaching a peak figure of £10,000 in the years 1943–44 to 1945–46, thereafter diminishing and ceasing after 1948–49. Since the inception of the scheme in 1942, 53 such village fuel areas, covering more than 400 acres, have been scheduled and planting is either completed or in progress.

20. The scope of the scheme is, however, quite inadequate in comparison with the needs of the country, and it is proposed that its period shall be extended and a sum of £10,000 provided for it annually throughout the decennium. This sum will be employed not only for the creation of new fuel areas but also for the improvement of existing Minor State Forests, such as are referred to in paragraph 6, suitable for development as fuel grounds. By the end of the decennium about 6,000 acres of village fuel areas could thus be established, with an annual yield of about 23,000 tons of wood fuel. No receipts are credited to the scheme since receipts from village fuel areas accrue not to general revenues but to the Village Forest Fund.

4. FOREST NURSERIES.

21. Apart from these State enterprises there is much room for the development of private forestry and arboriculture. All through the cultivated lands of Cyprus there are thousands of small parcels of land which are unsuitable for cultivation but which might well carry trees. There is, moreover, a growing conviction among the peasants, which should be fostered by all possible means, that trees have an important part to play in rural economy. Two of the main factors which operate against the spread of arboriculture are the insufficiency of planting material and the difficulty experienced by the peasant in providing the capital necessary for the establishment of a plantation.

22. In order to ensure the availability of planting material it is proposed that six seedling nurseries shall be established and maintained by Government with a total production of about two million seedlings a year. The capital cost of establishing these nurseries is estimated at £4,400, while the maintenance charges will amount to about £3,600 annually. On the other side of the ledger, it is anticipated that £2,000 a year will be recovered in the form of receipts from the sales of seedlings, thus reducing the net annual maintenance charge to £1,600. This moderate degree of subsidy is regarded as amply justified in consideration of the importance to the country of promoting the spread of arboriculture.

5. TREE PLANTING SUBSIDIES.

23. As mentioned in paragraph 21 above, the second factor which operates against the spread of arboriculture is the difficulty experienced by the peasants in providing the necessary capital. Seeing that tree-planting is, at long range, a lucrative enterprise, it is considered that, in general, assistance for this purpose, if given at all, should take the form of long-term loans at a low rate of interest. There are, however, cases where tree-planting presents special difficulty as, for example, where the reclamation of waste land is in question, and where a prudent farmer could not reasonably be expected to plant trees without direct financial assistance. It is proposed that £5,000 a year shall be set aside to provide subsidies to be granted in such cases, the expenditure being, in fact, a land utilization measure designed to secure planting on land which would otherwise remain uncultivated and uncultivable. Applicants would have to satisfy the Forest Department before planting that the plantations to be established qualified for a subsidy and no subsidy would be payable until the plantations were established. Were such a scheme published in 1946, the first subsidy would probably fall due to be paid in the year 1949–50.

D.—COMMUNICATIONS AND BUILDINGS.

1. FOREST ROADS.

24. The importance of an adequate system of communications to any considered scheme of forest management may be regarded as axiomatic. Forest roads are essential to enable timber and fuel to be extracted from exploitable areas, to provide access to other areas where afforestation and protective works are in progress, to allow of the rapid concentration of labour for fire-fighting and to ensure the mobility of the staff responsible for the protection of the forests and for the supervision of scattered forest works. Although a considerable net-work of forest roads has already been constructed, many more are required, and many of those already in operation are so narrow that extraction work is seriously impeded.

25. A programme of the additional road-work necessary for the efficient management of the Cyprus forests has been drawn up ; it envisages the construction of 183 miles of new roads, the construction of 86 miles of new inspection paths so aligned and graded as to permit of the passage of motor cycles, and the widening or improvement of 301 miles of existing roads and tracks. The total cost of this programme is estimated at £188,000 and, in order to keep pace with the afforestation programme already described, it should be completed within about fifteen years. It may be mentioned that provision is made only for unmetalled roads of the width necessary for purely forest purposes. Where, as in some cases, it is desirable to metal or widen a road in order to make it safe for the tourist traffic which is using the forest roads to an ever increasing degree, the cost should, it is considered, be treated as part of the general communications expenditure of the Colony and not as that of a forest activity.

26. On the basis of the programme described in the previous paragraph, which embodies the ultimate objective, the outlay on forest roads to be defrayed during the decennium will amount to £115,000 or £11,500 a year, to which must be added a further £10,000 for new road construction plant. The cost of maintenance will also increase but not so greatly as might otherwise seem probable, since some of the present maintenance expenditure will be rendered unnecessary by permanent improvements.

2. FOREST TELEPHONE SYSTEM.

27. With the development of the road system, a corresponding development of the forest telephone system will be required. This telephone system, which includes 337 miles of line, 4 exchanges and 62 instrument points, has proved of inestimable value in the development of forestry in Cyprus. It has saved untold thousands of pounds worth of forests which would otherwise have gone up in flames and, without it, it would have been quite impossible for the department to cope with the greatly increased volume of work thrown on to it by wartime demands and emergency. The forest system brings many mountain villages into telephonic communication with the rest of the island and can to this extent be regarded as a public utility service.

28. In order to complete the system, 193 miles of new trunk lines and 180 miles of new branch lines, with 9 new exchanges, are required. The cost of this programme which, like the road programme, should be completed within fifteen years, is £55,000. It is proposed that £4,000 shall be spent each year during the decennium on the extension of the telephone system ; there will naturally be a corresponding and gradually increasing rise in the cost of maintenance.

3. FOREST BUILDINGS.

29. The forest building programme has, in the past, lagged seriously behind the general programme of forest development. It is highly desirable from every point of view that as many as possible of the field forest staff should be housed within the forests but at present this is impracticable ; in many areas the only buildings available are mere hovels in extreme stages of decay. This lack of buildings has been offset, as a temporary expedient, by leasing premises in neighbouring villages, but the result has been unsatisfactory. The village houses available are, for the most part, of an extremely poor type, much below the standard which might reasonably be expected by the new generation of forest staff, and the arrangement has the additional disadvantage of placing the movements of that staff under the interested surveillance of the villagers and thus facilitating forest offences.

30. A building programme has been drawn up which envisages the construction at suitable strategic points in the forests of 10 forester's quarters, 39 forest guard's quarters, 9 forest patrol stations, a rest-house, canteen and recreation centre at Stavros, the headquarters of the Main Paphos Forest, and various stores, offices, garages and other buildings. The estimated cost is £55,000, with an allowance for maintenance. The need for the buildings is urgent and it is proposed that 60 per cent. of the expenditure shall be incurred in the years 1946–47 and 1947–48, leaving the balance to be spread over the remainder of the decennium.

E.—FOREST EDUCATION.

1. FOREST SCHOOL.

31. There is, at present, no school in Cyprus at which subordinate forest officers can be trained. The need for such a school is great and it is proposed that one shall be established in a village adjacent to the Paphos and Troodos forests, where members of the forest staff can be taught theoretical and practical forestry. Private students and forest staff from neighbouring countries will also be admitted on payment of fees. The school will be staffed by forest officers and there will be two courses annually, one in elementary forestry for the junior and another suitable for the more senior grades. The training staff of the school will, in addition to school duties, be expected to undertake certain types of forest research and to be responsible for organizing general forest publicity and education. The cost of building and equipping the school, with accommodation for 25 pupils and including a hostel and masters' quarters, is estimated at £13,000 ; the school will probably take two years to construct and maintenance charges (excluding staff, which is dealt with in paragraphs 33 and 34 below) to the extent of about £1,500 a year will be incurred during the remaining eight years of the decennium.

2. SCHOLARSHIPS AND TRAINING.

32. It is necessary further to make provision for the training of suitable Cypriots to replenish the senior forest administrative staff and for this purpose it is proposed that two scholarships, each of the value of £500 a year, shall be established so as to enable four selected students to undergo a five years' course of training in England during the decennium, the final three years of the course being spent at a University where the student will be expected to take an Honours degree in Natural Science or in Forestry or in both. A further sum of £500 a year will be set aside to meet the expenses of refresher courses and training tours for selected members of the forest staff in the United Kingdom, in India and in neighbouring Mediterranean countries. Such tours, in addition to providing direct technical experience, will be of great value as widening the otherwise inevitably restricted outlook of the Cypriot forest officer.

F.—STAFF.

33. A strengthening of the staff of the Forest Department is essential if it is to carry out efficiently the enhanced programme of work described in this chapter. An additional Assistant Conservator and certain additional Forest Ranger and Forester establishment will be needed to staff the proposed forest school. It is also desirable, in view of the expansion of the afforestation programme, that a botanist should be added to the staff of the department to undertake botanical, ecological and silvicultural research. It is further proposed that six Cypriot Local Assistant Conservators shall be recruited to strengthen the Head-quarters Office, the Working Plans Division and the Forest Engineering Division and to provide seconds-in-command in the three main Forest Divisions, thereby relieving the Assistant Conservator in charge of many routine duties and giving him more time for the planning and supervision of technical work. This proposal has the additional advantage of increasing the number of senior appointments in the department to be held by Cypriots. The Forest Ranger and Forester staff will also require strengthening, and more telephone supervisors, linesmen and operators will be needed in view of the proposed expansion of the telephone system.

34. The approximate ultimate cost of the proposed increase in permanent establishment will be :—

	£
Senior Staff : 6 Local Assistant Conservators and 1 Botanist..	3,500
Staff for Forest School	1,500
Other Staff	5,000
Total	10,000

The expansion will be gradual as it can, to a large extent, only take place as trained men become available.

G.—SUMMARY.

35. Details of the expenditure which must be incurred during the decennium in order to give effect to the programme above described are contained in the Appendix to this chapter. The considerable sum of £880,200 which is involved must be considered in relation to the value, present and prospective, of the asset which the expenditure is designed to protect and develop. At pre-war selling rates for standing timber and coppice wood, the value of the forest stocking was conservatively estimated to be worth at least six million pounds ; at present Cyprus war-time rates the total capital value is not less than thirty millions. The potential value of the forests, if systematically developed and exploited, can be reckoned at many times their present value. Having further in view the importance of the forests, apart from their commercial value, as catchments for irrigation water and as a prime factor in the rural economy of large portions of the island, the expenditure proposed, which will be spread over ten years, can hardly be regarded as excessive.

FORESTS.

APPENDIX.

Expenditure proposed on schemes included in the programme.

A.—BY YEARS.

Year	Afforestation						
	Mountain Forests			Lowland Forests			Village Fuel Areas
	Capital	*Less* Receipts	Net Total	Capital	*Less* Receipts	Net Total	Capital
	£	£	£	£	£	£	£
1945–46 ...	30,000	—	30,000	—	—	—	15,000
1946–47 ...	30,000	—	30,000	5,000	—	5,000	10,000
1947–48 ...	30,000	—	30,000	5,000	—	5,000	10,000
1948–49 ...	30,000	—	30,000	5,000	—	5,000	10,000
1949–50 ...	30,000	—	30,000	5,000	—	5,000	10,000
1950–51 ...	30,000	1,000	29,000	5,000	—	5,000	10,000
1951–52 ...	30,000	3,000	27,000	5,000	—	5,000	10,000
1952–53 ...	30,000	4,000	26,000	5,000	—	5,000	10,000
1953–54 ...	30,000	4,000	26,000	5,000	2,000	3,000	10,000
1954–55 ...	30,000	5,000	25,000	5,000	4,000	1,000	10,000
1955–56 ...	30,000	5,000	25,000	5,000	5,000	—	10,000
Total 1946–56 ...	300,000	22,000	278,000	50,000	11,000	39,000	100,000

Year	Afforestation					
	Forest Nurseries					Tree Planting Subsidies
	Capital	Recurring	Total	*Less* Receipts	Net Total	Recurring
	£	£	£	£	£	£
1945–46 ...	—	—	—	—	—	—
1946–47 ...	4,400	3,600	8,000	2,000	6,000	—
1947–48 ...	—	3,600	3,600	2,000	1,600	—
1948–49 ...	—	3,600	3,600	2,000	1,600	—
1949–50 ...	—	3,600	3,600	2,000	1,600	5,000
1950–51 ...	—	3,600	3,600	2,000	1,600	5,000
1951–52 ...	—	3,600	3,600	2,000	1,600	5,000
1952–53 ...	—	3,600	3,600	2,000	1,600	5,000
1953–54 ...	—	3,600	3,600	2,000	1,600	5,000
1954–55 ...	—	3,600	3,600	2,000	1,600	5,000
1955–56 ...	—	3,600	3,600	2,000	1,600	5,000
Total 1946–56 ...	4,400	36,000	40,400	20,000	20,400	35,000

A.—BY YEARS—*continued.*

Year	Communications and Buildings					
	Forest Roads			Forest Telephone System		
	Capital	Recurring	Total	Capital	Recurring	Total
	£	£	£	£	£	£
1945–46 ...	—	—	—	—	—	—
1946–47 ...	13,500	—	13,500	4,000	—	4,000
1947–48 ...	14,500	2,000	16,500	4,000	1,000	5,000
1948–49 ...	16,500	3,000	19,500	4,000	1,000	5,000
1949–50 ...	11,500	3,500	15,000	4,000	1,500	5,500
1950–51 ...	11,500	4,000	15,500	4,000	1,500	5,500
1951–52 ...	11,500	5,000	16,500	4,000	1,500	5,500
1952–53 ...	11,500	5,500	17,000	4,000	1,500	5,500
1953–54 ...	11,500	6,000	17,500	4,000	2,000	6,000
1954–55 ...	11,500	7,000	18,500	4,000	2,000	6,000
1955–56 ...	11,500	8,000	19,500	4,000	2,000	6,000
Total 1946–56 ...	125,000	44,000	169,000	40,000	14,000	54,000

Year	Communications and Buildings			Forest Education				Staff
	Forest Buildings			Forest School			Scholarships & Training	
	Capital	Recurring	Total	Capital	Recurring	Total	Recurring	Recurring
	£	£	£	£	£	£	£	£
1945–46 ...	—	—	—	—	—	—	—	—
1946–47 ...	16,600	1,200	17,800	6,500	—	6,500	1,500	3,000
1947–48 ...	15,900	1,200	17,100	6,500	—	6,500	1,500	4,000
1948–49 ...	3,700	1,500	5,200	—	1,500	1,500	1,500	6,000
1949–50 ...	3,000	1,500	4,500	—	1,500	1,500	1,500	7,000
1950–51 ...	3,000	1,500	4,500	—	1,500	1,500	1,500	8,000
1951–52 ...	2,800	1,500	4,300	—	1,500	1,500	1,500	8,000
1952–53 ...	2,500	1,800	4,300	—	1,500	1,500	1,500	9,000
1953–54 ...	2,500	1,800	4,300	—	1,500	1,500	1,500	9,000
1954–55 ...	2,500	1,800	4,300	—	1,500	1,500	1,500	10,000
1955–56 ...	2,500	2,000	4,500	—	1,500	1,500	1,500	10,000
Total 1946–56 ...	55,000	15,800	70,800	13,000	12,000	25,000	15,000	74,000

Summary.

Year		Capital	Recurring	Total	*Less* Receipts	Net Total
		£	£	£	£	£
1946–47	...	90,000	9,300	99,300	2,000	97,300
1947–48	...	85,900	13,300	99,200	2,000	97,200
1948–49	...	69,200	18,100	87,300	2,000	85,300
1949–50	...	63,500	25,100	88,600	2,000	86,600
1950–51	...	63,500	26,600	90,100	3,000	87,100
1951–52	...	63,300	27,600	90,900	5,000	85,900
1952–53	...	63,000	29,400	92,400	6,000	86,400
1953–54	...	63,000	30,400	93,400	8,000	85,400
1954–55	...	63,000	32,400	95,400	11,000	84,400
1955–56	...	63,000	33,600	96,600	12,000	84,600
Total 1946–56	..	687,400	245,800	933,200	53,000	880,200

B.—BY SCHEMES.

Serial No.	Scheme	Para. of Chapter	Capital	Recurring	Total	*Less* Receipts	Net Total
			£	£	£	£	£
	Afforestation.						
1	Mountain Forests	14–17	300,000	—	300,000	22,000	278,000
2	Lowland Forests	18	50,000	—	50,000	11,000	39,000
3	Village Fuel Areas	19–20	100,000	—	100,000	—	100,000
4	Forest Nurseries	22	4,400	36,000	40,400	20,000	20,400
5	Tree Planting Subsidies ...	23	—	35,000	35,000	—	35,000
	Communications and Buildings.						
6	Forest Roads	24–26	125,000	44,000	169,000	—	169,000
7	Forest Telephone System ...	27–28	40,000	14,000	54,000	—	54,000
8	Forest Buildings	29–30	55,000	15,800	70,800	—	70,800
	Forest Education.						
9	Forest School	31	13,000	12,000	25,000	—	25,000
10	Scholarships and Training...	32	—	15,000	15,000	—	15,000
	Staff.						
11	Staff	33–34	—	74,000	74,000	—	74,000
	Total		687,400	245,800	933,200	53,000	880,200
			Summary.				
	Afforestation	...	454,400	71,000	525,400	53,000	472,400
	Communications and Buildings	...	220,000	73,800	293,800	—	293,800
	Forest Education	...	13,000	27,000	40,000	—	40,000
	Staff	...	—	74,000	74,000	—	74,000
	Total		687,400	245,800	933,200	53,000	880,200

CHAPTER V.

MEDICAL.

A.—INTRODUCTORY.

1. The Medical Department is the authority which is responsible for public health throughout Cyprus. It provides hospitalization for general cases at Nicosia and at the headquarters of each district and it maintains a tuberculosis sanatorium, a mental hospital and a leper farm. It provides medical and sanitary services in the rural areas through the agency of a staff of medical officers, health inspectors and compounders, assisted by travelling specialists in eye diseases and dentistry. It provides treatment under the social insurance scheme for certain classes of Government staff and workmen. In conjunction with the Water Supply and Irrigation Department it conducts a systematic campaign against malaria. It is responsible also for port health work and for the prison medical service.

2. One of the main aims of the department is to arrange for the training of Cypriot personnel so as gradually to enable such personnel to be placed in positions of responsibility in connection with its work. There is much that requires to be done both as regards the improvement of hospitalization and the development of health services in the villages, but all such schemes are dependent on an adequate supply of trained doctors, nurses and other staff being available. The speed of advance must necessarily be conditioned by the rate at which this supply is forthcoming and on both political and economic grounds it is essential that the supply should be locally obtained, a minimum only of British staff being retained for specialised duties and in order to assist in the supervision and training of Cypriot personnel. The training of dispensers, midwives, health inspectors and social welfare workers is already undertaken and an arrangement is in force under which educated girls receive, at Government expense, training as nurses at the Nursing School of the American University at Beirut. These expedients do not, however, do more than touch the fringe of the matter and schemes for the training of staff of every grade must be given the highest priority in the department's post-war development programme.

3. The two main requirements in the sphere of public health are, first, an extension and improvement of the hospitalization facilities provided by the Medical Department and, secondly, the development of health services in the rural areas. The position in respect of malarial control measures has recently been revolutionized by the substitution, for drainage and canalization, of a system of wholesale species eradication by the use of larvicides and insecticides. The question is so important, and the type of work involved so different from the normal functions of the Medical Department, that it has been thought desirable to deal with the subject in a separate chapter.

B.—HOSPITALIZATION.

1. GENERAL HOSPITALS.

4. Excluding such special institutions as the tuberculosis sanatorium, the mental hospital and the leper farm, Government now maintains six hospitals in Cyprus, namely, the General Hospital in Nicosia and smaller district hospitals in the five district headquarter towns of Famagusta, Limassol, Larnaca, Paphos and Kyrenia.

5. Until the beginning of the present year, only the General Hospital at Nicosia and the district hospital at Limassol were the property of Government. The other four district hospitals, which had been founded in the last century, were owned and managed by local boards, on which Government was usually represented by the Commissioner and the Medical Officer of the district. Known as the State-aided hospitals, finance for their maintenance was obtained from hospital fees, contributions by the public, charitable bequests and Government grants. For a long time past this system had failed to work satisfactorily. The money obtained by the local boards, in spite of continued and commendable efforts on their part, fell much short of the sum required for the proper maintenance of the institutions, which thus became more and more dependent on Government subventions. The accommodation offered was in many cases unsuitable, maintenance was neglected, equipment was seriously defective and medical standards were low.

6. It was for these reasons that, with effect from the 1st January, 1945, Government, with the general approval of the Municipal Councils concerned, the hospital boards and the public generally, took over the four hospitals and assumed full responsibility for their maintenance and operation. It was realized at the time that the transfer would involve considerable expenditure in bringing the administration of the hospitals up to a reasonable standard, but it was felt that the alternative of allowing them to continue in a state of inefficiency with poor staff and unsatisfactory direction, maintenance and equipment, but making increasing demands for financial assistance from Government, was not one which could be accepted.

7. In the following paragraphs are detailed the measures which are considered necessary to ensure the provision of proper facilities in the six general hospitals now in Government ownership.

(*a*) *Nicosia General Hospital.*

8. Until the outbreak of the present war, Nicosia was served by a hospital constructed half a century previously. Additions, mostly of a purely temporary character and many of them merely of lath and plaster had been made from time to time without regard to any general plan. The result was a heterogeneous collection of unsuitable buildings, inconveniently arranged, very difficult to work, and lacking in most of the elementary essentials of a modern hospital. To make matters worse, even the expansion secured by these methods failed to keep pace with the demands for admission and serious overcrowding was added to the inherent drawbacks of an unsuitable set of buildings.

9. The construction of a new hospital in close proximity to the old one was approved in 1936 and it was opened in 1939, about £30,000 having been spent on its construction. Owing to financial considerations the size of the new hospital was kept within rigid limits (it provided only about ten more beds than did the buildings which it superseded) and it has never proved large enough to meet even the most pressing needs. It contains about 120 beds but overflows into the dilapidated buildings and huts which are left over from the old hospital. In these buildings and huts are housed, *inter alia*, the maternity section (where highly unsuitable conditions obtain and no facilities exist for the training of midwives), the tuberculosis and venereal disease clinics, the outpatients' department and the laundry, the last mentioned being conducted on the most primitive lines. Nurses have to be accommodated in rented houses in the neighbourhood. Congestion in the hospital itself prevents the proper segregation of cases which should be segregated and specialist officers dealing with eye, ear, nose, throat and skin diseases are hampered in their work by the difficulty experienced in allocating beds specifically for their patients and by the absence of the special facilities which the treatment of their cases requires.

10. To meet these disadvantages, it is now proposed to extend the Nicosia hospital so that the major hospitalization and surgical work of the Island can be concentrated there. In this way, it will be possible to provide in Nicosia every type of treatment under specialist officers, thus obviating the dissipation of energy which is otherwise inevitable. Under this system the district hospitals will serve a dual function: they will deal directly with ordinary disease and with minor surgical needs and will act as clearing stations for the more serious cases. The comparatively small size of the Island makes a system of this kind not only possible but economical.

11. The Nicosia hospital will be extended by the construction of a new block connected with the present building so as to provide in all about 220 beds for cases of all kinds, and the accommodation will be so designed as to permit of separate rooms or small wards being set apart for cases requiring special or segregated treatment. Under this arrangement, a proper maternity department will be established in the hospital itself. The present hospital is constructed on concrete piles; the space between these piles is now being walled in and, in conjunction with the ground floor of the new block, will provide accommodation for the outpatients' department and for the tuberculosis and venereal disease clinics. A proper laundry, with modern facilities, will be constructed in the grounds.

12. Closely connected with and, indeed, one of the most important features of the extension of the hospital will be the erection in the grounds of a nurses' training school and home. Reference has already been made, in paragraph 2 of this chapter, to the pressing need for a supply of trained nurses not only for work in the Nicosia hospital but also to staff the district hospitals and to develop health services in the rural areas. So much of the shell of the old hospital as is suitable for the purpose will be incorporated in the nurses' school and home but it will be virtually a new building, affording residential accommodation for a hundred nurses. Quarters will also be constructed for the matron and for the senior nursing staff.

13. As soon as the new hospital is built, the unsightly sheds and barracks which formed parts of the old hospital will be dismantled. There are certain buildings in the grounds, however, which are still serviceable and these will be retained and modernised. They will afford accommodation for the administrative offices of the Medical Department and for the Sanitary Inspectors' school (both already housed in the grounds, the former in an unsuitable building and the latter in a hut), for garages for ambulances and lorries and for a proper medical store, which is at present lacking.

14. The total capital cost of the scheme is estimated at £172,000, of which £69,000 represent the cost of the extension of the hospital, £87,000 that of the nurses' training school and nursing staff quarters, and £16,000 that of the adaptation of existing buildings to new uses. The additional cost of maintaining the hospital as thus enlarged, including the nurses' school, will be about £3,500 per annum. As regards timing, the first unit to be constructed should be the nurses' home and school since it will be impossible to utilize to the full the extension of the hospital until trained nurses are available to man it. It is proposed that the building of the home and school shall be begun in 1946–47 and completed in the following year; the extension of

the hospital will then be taken in hand and it should be ready by the end of 1948–49. By utilizing the services of nurses trained in Beirut under existing arrangements the best use possible will be made of the enlarged hospital until the first nurses to be trained in the new school have finished their courses.

(b) *Limassol Hospital.*

15. As already stated, prior to the assumption by Government of responsibility for the State-aided hospitals, the hospital at Limassol was the only district hospital under the direct management of the Medical Department. It was constructed by Government in 1923 to replace a pre-existing municipal hospital and is in many respects out-of-date. In particular, the operating theatre is faulty as regards both its construction and its location, the arrangements for maternity work are wholly inadequate, the kitchen and laundry are of the most primitive kind and the accommodation for staff, which is provided partly in the upper storey of the hospital and partly in a shed in the grounds, is unsuitable and insufficient to meet the reasonable needs of the institution. The question of staff accommodation is becoming of increasing importance in all the hospitals in Cyprus as it cannot be expected that better class girls will take to the nursing profession unless arrangements are made to house them decently and in some degree of comfort.

16. The question of constructing a new hospital at Limassol has been under consideration for some time past but it is doubtful whether the expenditure involved, estimated at about £57,400 excluding the cost of a site, can be justified on medical grounds, seeing that the present building is in structurally good condition and is capable of modernization for a much smaller sum. It is therefore proposed that such modernization shall be undertaken. Proper quarters for the matron, sisters, nurses and servants will be built in the grounds of the hospital, where there is ample space for the purpose, and the accommodation thus freed in the upper storey of the main building will be converted into wards, including proper maternity wards. A new operating theatre on modern lines will be constructed and the other defects mentioned will be remedied. There will be a small increase of bed strength, from 56 to 60, but the space available for beds will be much extended and the congestion which obtains at present in certain departments will thus be eliminated. The cost of modernization on these lines will be about £30,000 or little more than half the cost of a new hospital. Properly to staff the hospital, as thus modernized, will entail an additional recurring expenditure of about £200 per annum.

17. It has been suggested, seeing that the Police Headquarters at Limassol are in many respects unsuitable, that it might be economical, rather than to construct a new Police Headquarters, to construct a new hospital and to move the police into the present hospital buildings. Even should this alternative prove to be desirable on general grounds, it would not affect the fact that the maximum amount which it would be justifiable to charge against the medical head would be the £30,000 mentioned in the previous paragraph.

(c) *State-aided Hospitals newly taken over by the Medical Department.*

(i) *Larnaca, Paphos and Kyrenia.*

18. As already mentioned in paragraph 5, the State-aided hospitals which have been taken over this year by the Medical Department have, for a long time past, been inadequately maintained and a certain amount of alteration and renovation is essential in order to put them into such a condition that Government will have no cause to be ashamed of them. Additional staff will also be needed in each case, that employed under the State-aided system having fallen short of the real requirements of the hospitals. A capital expenditure of about £5,000 and additional recurring expenditure to the extent of £400 a year will be necessary to bring the three hospitals at Larnaca, Paphos and Kyrenia up to standard.

19. In the case of the hospital at Larnaca, improvements in the hospital itself will have to be accompanied by the construction of proper staff quarters, those at present provided (partly in the hospital and partly in detached barracks) being inadequate and in other respects unsuitable. It is proposed that quarters on the same lines as those projected at Limassol shall be built in the grounds of the hospital, where the necessary space is available. The cost of the quarters is estimated at £17,000. Here again, the removal of staff from the hospital will enable a slight increase of bed strength, from 56 to 60, to be effected.

(ii) *Famagusta.*

20. It was fully recognized, when the State-aided hospitals were taken over by the Medical Department, that the hospital at Famagusta was beyond repair. It was constructed some 45 years ago, has never been properly maintained and is now in an advanced stage of dilapidation. Its situation is also wholly unsuitable; the site backs onto a railway siding with the result that the hospital is noisy and real cleanliness

impossible. Many of the arrangements within the hospital itself, and in particular the maternity department, are utterly inadequate. No renovation or modernization would make the present building fit for hospital use and it is therefore proposed that an entirely new hospital of 60 beds, in place of the 41 beds now provided, shall be constructed for Famagusta. A sufficient area of Government land, suitably situated on the outskirts of the town, is available for the purpose. The cost of the new hospital, designed on modern lines and with proper accommodation for staff, will be about £57,400 ; the cost of its maintenance allowing for efficient staffing, will be about £300 a year more than the amount now being spent on the existing hospital.

(d) *Results of Development Proposed.*

21. The implementation of the proposals made in the preceding paragraphs will make six Government general hospitals, all properly equipped and staffed, available to the public and will effect a much needed increase in bed strength from 338 to 465, as shown below :—

District	*Population*	*Bed Strength :*	
		Present	*Proposed.*
Nicosia	128,141	120	220
Limassol	61,754	56	60
Larnaca	50,345	56	60
Famagusta	80,090	41	60
Paphos	45,378	34	34
Kyrenia	28,822	31	31
Total	394,530	338	465

The bed strength contemplated can hardly be regarded as excessive, seeing that it allows for only 1.2 beds per 1,000 of population. To this number will eventually be added about 100 or 120 beds which will be available in rural hospitals under the scheme for the establishment of Rural Health Units, raising the proportion to 1.5 beds per 1,000. Even this proportion is moderate when compared with 5 or more beds per 1,000 which many authorities consider to be the optimum proportion. Nor is it proposed to provide more in the nature of accommodation or equipment than are generally regarded as the minimum essentials of a modern hospital. That it should be necessary to spend nearly £300,000 in order to achieve these ends is the measure of the extent to which, owing to lack of funds, hospitalization has in the past lagged behind the needs of the Island.

2. SPECIAL INSTITUTIONS.

(a) *Tuberculosis Sanatorium.*

22. Tuberculosis in Cyprus is at once a medical and a social problem. The victim of tuberculosis is, in general, a social outcast : even more so, indeed, than is the leper. This factor adds considerably to the responsibility of Government for making adequate arrangements for the accommodation and treatment of tubercular patients.

23. Prior to 1942, the treatment of such patients was undertaken at a Government institution at Athalassa, near Nicosia, where 52 beds were available. Most of the facilities regarded as essential in a modern tuberculosis hospital were, however, lacking at Athalassa and to remedy this situation a small sanatorium, designed for 36 beds, was constructed at Kyperounda in the Troodos hills. It had hardly been completed when the exigencies of the war made it necessary for Government to surrender the Athalassa buildings for the use of the Royal Air Force and in March, 1942, the 52 patients there in residence were moved to Kyperounda, which was thus seriously overcrowded from the outset.

24. Since that time applications for treatment have been so numerous that in October, 1944, Government found itself forced to open an additional temporary institution at Aghirda at the foot of the Kyrenia hills. The Aghirda institution has now been closed and the patients transferred to Athalassa.

25. A further factor, which has up to date been ignored but to which consideration must be given in devising plans for the treatment of tuberculosis, is the increasing prevalence of bone tuberculosis. This disease is at present treated in the general hospitals. Seeing that a case of bone tuberculosis may occupy a bed for a period ranging from six months to two years and that, once admitted to the wards, it is most difficult to discharge such a case, a great strain is imposed on the accommodation in the general hospitals owing to the absence of sanatorium facilities for bone tuberculosis treatment.

26. It has now been decided that it is desirable from every point of view that tuberculosis hospitalization should be centralized at Kyperounda and the enlargement of the sanatorium there, so as to enable it to deal with the demands of the Island as a whole, is thus a matter of urgency. In order, on the one hand, to relieve the overcrowding existing in the sanatorium and, on the other, to improve the living conditions of the matron and nurses who are at present required to reside in the same building as the patients, a grant of £33,000 was approved in December, 1944, under the Colonial Development and Welfare Act (D. 456) for the construction of separate quarters for the nursing staff. It was recognized that, apart from the danger of infection, the existing arrangements were thoroughly bad from the psychological aspect, since they meant that the staff were never away from their work, an aspect the importance of which is intensified in a place such as Kyperounda where no relaxation outside the institution is available.

27. The construction of staff quarters is now being taken in hand and the scheme will, by making available the space now occupied by the staff in the groundfloor of the main building, enable the congestion which obtains in the hospital to be relieved. The next stage must be the enlargement of the sanatorium so as to enable it to cope effectively with the full needs of the situation. No facilities whatever are available for the treatment of children, who have to be treated either in adult wards at Kyperounda or in Nicosia.

28. It is therefore proposed that the sanatorium shall be enlarged by removing from the main building all staff, including maids and male staff, now housed in it and by the addition of an upper storey. In this way, suitable accommodation can be secured for 100 adult patients and 20 children, together with facilities for occupational therapy which are at present entirely lacking. The rehabilitation of ex-sanatorium patients is a difficult problem and in existing circumstances little or nothing can be done either to amuse them or to prepare them for life after their release from treatment. It is hoped that it may be possible to start classes in typing and shorthand, tailoring, sewing, carpentry, cobbling and agricultural pursuits and in this way to remedy the deficiency. It is already the policy to employ as many ex-patients as possible at the sanatorium and at present one nursing sister, one clerk, one nurse and two male orderlies are ex-patients.

29. The X-ray equipment in use at the sanatorium is out-of-date and defective and must be renewed, and a mobile set is also required for the purpose of taking primary chest X-ray and miniature films in the district hospitals, the tuberculosis clinics and the rural health units.

30. Simultaneously with the enlargement of the sanatorium, the grounds will be extended so as to provide space for cottages for the male staff and to enable a farm to be established. The farm will serve two objects. It will secure a supply of milk and food for the institution the cleanliness of which will be beyond suspicion and it will provide occupation for patients drawn from agricultural life. The only addition required to the nurses' quarters now under construction will be an extension to house the maids who will be removed from the main block of the hospital; the scheme already approved was designed so as to afford accommodation for the full nursing staff which will be required when the sanatorium is enlarged to 120 beds.

31. The total expenditure envisaged on the sanatorium is about £96,000, made up as follows :—

	£
Construction of staff quarters (already approved)	33,000
Alteration and enlargement of sanatorium	30,000
Maids' quarters	11,000
Male staff quarters	6,000
Land and buildings for farm	11,000
X-ray equipment	5,000
Total	£96,000

The cost of staffing the sanatorium, enlarged as proposed, will be about £1,900 a year more than the expenditure now being incurred.

(b) *Mental Hospital.*

32. The Cyprus mental hospital, with accommodation for 275 mental patients, is situated on the outskirts of Nicosia. It consists, in essence, of a high stone wall enclosing a large number of small single-storied buildings in some of which the patients are housed while others contain dining and recreation rooms, sanitary arrangements, guards' quarters and the other general needs of an asylum. The buildings are grouped round two large, bare quadrangles in which the patients, the males in one and the females in the other, are free to sit or wander. Each residential block is divided into four cells, two of them accommodating four patients each and two of them accommodating two (or one only in the case of dangerous patients).

33. The institution serves a dual purpose. Insofar as the public is concerned, it keeps lunatics off the streets and secures their segregation. Insofar as the patients are concerned, it provides them with a bed on a cell floor, with food, clothes and the other necessities of life; and with space in which to move and exercise themselves. It is clean and efficient but the title of mental hospital is altogether a misnomer. It has all the appearance and many of the attributes of a gaol. There is no provision for the separation of persons suffering from different degrees or different kinds of mania, no arrangements for the employment of patients on types of work which they might be capable of undertaking and no facilities for the application of modern methods of treating mental disease.

34. The construction of a proper mental hospital, which will be a hospital in the true sense of the word, is undoubtedly one of the major medical needs of Cyprus. It should be so situated that land will be available where patients fit to do so can work out of doors on gardening and similar pursuits. The accommodation should be so arranged that lunatics of various types will not be indiscriminately mixed, as is the case at present, and there should be facilities for occupational therapy of all kinds. It should, in short, be a place where treatment and not mere confinement would be the key-word.

35. The present site, which is valuable land and which contains a number of sound buildings adaptable to other purposes, should, if sold, realize an amount amply sufficient to cover the purchase price of a really suitable alternative site with extensive grounds at a greater distance from the town. The cost of the institution proper may possibly be of the order of £125,000 for 300 patients. The maintenance of the new hospital would further involve an expenditure about £600 a year higher than that now being incurred on the existing institution. These are large figures but it is impossible to deny that the present asylum is a reproach which cannot be allowed to continue indefinitely.

36. In order to spread expenditure, it is proposed that the construction of the new mental hospital shall be put in hand in 1949–50, immediately the extension of the General Hospital at Nicosia is completed. Some at least of the additional staff should, however, be recruited as soon as possible and do their best to initiate treatment pending the removal of the institution to new and more suitable quarters.

(c) *Leper Farm.*

37. The leper farm is situated near Nicosia on a large park-like estate, which was dedicated for the use of lepers under the terms of an old bequest made in Turkish times. About a hundred lepers are in residence there; they are accommodated in single-storied, stone buildings, each building containing about six rooms and two lepers sharing each room. The inmates are allowed, if they so desire, to bring their own furniture and equipment to supplement that provided by Government. There is a club in the grounds for purposes of recreation, a bath house, a dispensary, a hospital, a Mosque and a Greek-Orthodox Church. A wireless receiving set is installed and, until recently, there was a cinema which, however, has been discontinued owing to the lack of interest shown by the patients. In order to avoid any outward indication of compulsory confinement the grounds are unfenced and responsibility for seeing that the inmates do not break bounds devolves, not too successfully, on four guards, of whom two are always on duty. Government provides the inmates with clothes, rations (which they prefer to cook themselves), and an allowance in cash which they are free to spend on domestic necessities and small luxuries, such as cigarettes and the like.

38. This report is not the place in which to discuss the respective merits of the compulsory and voluntary systems as applied to the segregation of lepers. Many authorities hold that the compulsory system, which is that in force in Cyprus, has disadvantages in that, when so segregated, the patient tends to adopt an attitude of non-cooperation. In effect, he says "You have brought me here against my will. It is your duty to do everything for me. I shall do nothing".

39. This attitude of mind is a common symptom of leprosy and is much in evidence on the farm, which is a source of continual anxiety to the Medical Department. The lepers segregated there are idle and insubordinate. They live in reasonably pleasant surroundings and in comparative comfort at Government expense; nothing could be more marked than the difference between the conditions obtaining in this respect on the leper farm and those obtaining in the so-called mental hospital, though the patients in both are drawn from the same strata of society. Yet the lepers show no appreciation of what is done for them; they refuse to do any work whatsoever about the farm and have to be coerced even into keeping their own quarters clean. They take advantage of the degree of freedom allowed to them by breaking bounds and by selling for cash across the boundary the clothes supplied to them by Government.

40. Proposals have been made for the removal of the farm from the vicinity of Nicosia to some place where a model village could be established in which the lepers could live as a village community and where those fit to do so could practise agriculture. First class irrigated agricultural land would be needed for this purpose and the cost of the move would consequently be high; a recent estimate places it at £147,000.

It is not, however, clear that any advantage, other than that of the removal of the patients from Nicosia, which is obviously desirable, would be obtained from this large expenditure. There is no reason to believe that the lepers would be prepared to work at agriculture in a model village when they refuse, in their existing surroundings, even to remove the weeds growing outside their doors.

41. The problem of the lepers is a social problem and must, in the first instance, be treated as such. Their present mental attitude is fatal in leprosy as regards both the discipline of any institution in which they may be confined and the chance of recovery of the patients. Until this attitude is changed, nothing effective can be done for them: the best method of attacking the problem would probably be to enlist the good offices of some society, with experience of leprosy work, which might be willing to run the settlement on lines which attached to the social side of the treatment as much importance as to the medical. Pending such a change, and until experience of its working has been gained, it is not considered that there would be justification for the inclusion in the development programme of a large sum for the removal of the farm and the establishment of a model village elsewhere.

C.—RURAL HEALTH UNITS.

42. The question of the provision of adequate medical and health services in the rural areas of Cyprus is one of the first importance, seeing that the rural population numbers about 300,000 souls or three quarters of the total population of the Island.

43. Under existing arrangements, a District Medical Officer is posted at the headquarters of each district on whom devolves the general responsibility for the health of the district. At important centres in the district, medical sub-stations, each under a Rural Medical Officer, are established, this officer being in general charge of health matters in the surrounding villages. Within these villages there are a certain number of branch dispensaries, where the Rural Medical Officer sees patients and where simple medical treatment and medicine can be obtained at all times.

44. Loosely interwoven into this general framework are the various departmental organizations which deal with the control of tuberculosis, leprosy, venereal diseases, ophthalmic complaints, dental affections, typhoid fever, malaria and public health matters in general. The officers responsible for some of these branches work directly under the headquarters of the department; those responsible for others work directly under the District Medical Officer.

45. Experience has shown that the present system has several defects. The areas allotted to medical sub-stations are in many cases so large that some villages receive visits from the officers in charge only at infrequent intervals except during an outbreak of infectious disease or when there is a call in connection with an urgent case. Given the best will in the world, it is almost impossible to obtain full co-ordination between the various organizations, already mentioned, which deal with specific branches of the department's work. And there is an entire lack of pre-natal, infant welfare and school medical work.

46. The average villager, through lack of education, has, in the past, been but little interested in health measures, although he likes to feel that there is some organization easily available should he fall sick. He is apt to regard preventive medicine as a form of Government interference with his normal way of life and to resent it as such. The village health authorities themselves complain that the administration of the health laws is difficult, if not impossible, on this account and it is undeniable that, under the existing system, the villagers have failed to co-operate in the measures designed to improve conditions for their benefit.

47. These difficulties arise to a large extent from the fact that the work of the Medical Department is not sufficiently closely connected with the day to day life of the village. It is not regarded as part of such life but as something imposed upon it from outside. For any improvement to be effective, the villager must be encouraged to regard public health as his own responsibility rather than as that of Government, and the village health centre, where such exists, as an integral factor in the village life like the village club. If this end is to be achieved, decentralization must be effected and health centres established as village organizations in respect of which the Government Medical Department will exercise the functions of a guide and mentor rather than those of an executive authority.

48. It is with this object in view that the scheme of Rural Health Units is now being introduced in Cyprus. Under this scheme, the Island will be divided into units each containing about 30,000 persons; eleven such units are at present contemplated, although it is recognized that experience may show some different division to be preferable. At the headquarters of each unit will be situated the Health Centre for the area. This building will have a central reception or conference hall in which public health lectures will be given and which will be used as a waiting-room for patients. Around the hall will be grouped rooms where the medical officers can see out-patients and hold their clinics, where

health inspectors, health visitors and midwives can work, and where records will be maintained. Within the building will be a laboratory, a dispensary and a small rural hospital of eight beds or so. There will also be a crèche where working mothers can leave their children when absent on work.

49. This central building will be the hub of each unit and from it all medical work in the area will be controlled. Within this area, in villages conveniently located for the purpose, there will in general be four sub-stations of much smaller dimensions but sufficiently large to enable clinics to be held and to accommodate the health inspectors, health visitors and midwives working in the area of the sub-station. Finally, in each village there will be a medical room where patients can be seen and from which doctors, nurses and midwives can operate.

50. A medical officer will be in charge of each unit with two or more assistant medical officers under him, each assistant medical officer being in charge of two sub-stations and residing at one of them.

51. One of the most important features of the organization will be the trained health visitor, a woman who will be responsible for house-to-house visiting, for recording the name of every member of every family and for bringing to the notice of the medical staff cases of ill-health, insanitary conditions, overcrowding and the like. This house-to-house visitation will be the basis of the work and it is hardly too much to say that it will be upon the extent to which the health visitor succeeds in obtaining the confidence and co-operation of the villagers that the success of the scheme will depend.

52. It is impossible to lay down in advance exactly what staff will be required, as this will depend upon the geographical location of the villages within the unit. But for a unit containing about fifty villages and 30,000 inhabitants the staff would probably include, in addition to the three medical officers already mentioned, 5 health inspectors and assistant health inspectors, 6 health visitors, 6 nurses and 8 midwives.

53. Pre-natal and infant welfare clinics will form an important part of the work of every unit. Visiting dentists and oculists will take care of dentistry and eye disease. In addition, special clinics will be held by specialists deputed from headquarters to deal with tuberculosis, venereal disease, leprosy and other diseases which necessitate specialist advice and treatment. The centres will be linked to the district hospitals by an ambulance service so that serious cases can be rapidly transferred to hospital.

54. The health unit will not only provide medical treatment for those who are sick but will perform the equally or more important function of preventing sickness from occurring. It will be its aim to see that village refuse is properly disposed of, that the village water supply is properly protected, that cafes, shops, streets and markets are kept in a clean and sanitary condition and that, in general, the village home is made a better and healthier place.

55. It is regarded as essential to the success of the scheme that the villagers should pay part at least of the cost ; only in this way will they be brought to look on the units as institutions of real local interest and not as Government undertakings. They will be required, in return for the provision of free treatment, to assist in the establishment of the units by the provision of sites and materials and to bear half the cost of maintenance, the latter amount being collected in the form of a rate. Units will only be established with the majority consent of the people whom the unit is to serve and subject to their acceptance of their share of the expense.

56. Such, in the briefest possible form, is the scheme for the establishment of Rural Health Units in Cyprus. When first mooted, it was thought that considerable propaganda would be necessary to secure its acceptance by the villagers but the contrary has proved to be the case. The nature of the scheme having been comprehended, there is now an almost Island-wide demand for its introduction and the main embarrassment of the Medical Department is not in establishing units but in explaining that progress must be slow and that it will be years before the necessary trained staff will be available to enable the Island to be covered.

57. Up to the present only one unit has been established, at Athienou, in the Larnaca District, and so far only the centre is in operation. To the extent to which trained staff is available, local personnel is employed. The assistant health inspector, the dispenser, the two rural hospital nurses and the health visitor, (a midwife-nurse) are all residents of Athienou. Previous to the opening of the centre on February 1st, 1945, a house-to-house survey was made of the village, covering 632 houses, and full details of the houses and of the families occupying them are thus available. The villagers provided a house for the temporary accommodation of the centre and subscribed £50 for its repair and enlargement ; they have further donated a site for the permanent building and are now engaged in bringing stone to the site for its construction. General, ante-natal and infant welfare clinics are in operation and regular clinics are also held by the Government travelling dentist and oculist. Within seven weeks of the opening of the centre 68 women had been registered at the ante-natal clinic, 476 infants had been entered in the books of the infant welfare clinic and all the beds in the small hospital were full ; the village authorities in the surrounding areas had provided

free accommodation for branch clinics, and ante-natal and infant welfare clinics were being organized there with the help of local midwives. The avidity with which the opportunities offered by the establishment of the centre have been seized by the villagers of Athienou affords the best possible augury for the success of the whole scheme.

58. It is estimated that the cost of establishing each of the first two units (including expenditure on buildings and equipment, the training of staff and the pay of staff while under training) will be £12,500, and that the cost of establishing each subsequent unit will be £10,000. In November, 1944, a grant of £125,000 under the Colonial Development and Welfare Act (D.423) was approved for the purpose of establishing twelve such units, the expenditure to be spread over the six years beginning from 1945–46, £25,000 to be spent in that year and £20,000 in each subsequent year until 1950–51. As stated in paragraph 48, only eleven units are contemplated but provision has been made to enable a twelfth to be established, if necessary. The cost of maintaining a unit will be about £7,000 a year, of which half will be defrayed by the villagers; there will further be a saving in the present expenditure on public health work in the districts which will reduce the additional amount to be found by Government in respect of each unit to about £1,600 a year. It is now considered that the pace of advance originally suggested was too rapid and that, having regard to the rate at which a sufficiency of trained staff is likely to become available, it would be wiser to allow for the opening of two units in each of the first three years of the scheme and of one only in the next six. On this basis, the amount to be defrayed by Government during the decennium will be £100,000 in capital and £145,600 in additional recurring expenditure.

D.—MISCELLANEOUS.

1. School Medical Service.

59. At the present time, there is no planned scheme for the adequate medical examination of elementary school children. Medical officers may or may not, in the course of their itineraries, make a cursory examination of the children when visiting a village but the work is, for the most part, entirely neglected.

60. In the towns, many school committees have appointed medical officers who are on call for their respective schools, but there is, in general, no provision for the routine examination of pupils and, even when such an examination is made, it is often made on lines which are far from adequate.

61. The importance of school medical work is now universally recognized. It has many sides. With a school medical service in existence, all children would be medically examined on admission to school and periodically throughout their school career, and the schools themselves would be inspected at regular intervals by a medical officer who would report any sanitary defects to the Education Department. Lectures on hygiene would be given to teachers. Ailing children would be treated or, if requiring special attention, be recommended for treatment to the rural clinic or to the out-patient department of the urban hospital, as the case might be. In the towns, there would be school nurses who would carry out the daily treatment recommended by the medical officer. In villages, the teacher in charge would be trained in simple dressings and the routine treatment of common ailments. The nurses, who would be of the social worker type, would be responsible also for propaganda with the parents in relation to the child and would act as liaison officers between the medical officers, the parents and the teachers. An efficient school medical service should lay the foundations of good health in adult life.

62. The staff necessary for the establishment of such a service in Cyprus would comprise a medical officer in charge, a medical officer for each district and about eighteen nurses, two for each town and one for the rural area of each district. The cost would be about £6,500 per annum. To begin with, the service would run parallel to the scheme for Rural Health Units, with the intention that, when that scheme was fully established and Island-wide, it would be absorbed in it, in the same way as the tuberculosis and trachoma services will ultimately be absorbed.

63. The Director of Education and his inspectors have for long been urging the establishment of a school medical service but no action has yet been possible in the matter, partly because of the insistence of more pressing demands and partly because of the difficulty of securing the necessary skilled personnel. The latter difficulty persists but a start should be made. It is proposed that a medical officer should be sent to England for post-graduate training in school work and that the service should thereafter be gradually organized, coming into full operation in 1950–51.

2. Tuberculosis Dispensaries.

64. The desirability has already been mentioned, in paragraph 26, of centralizing the hospitalization of tuberculosis at the Kyperounda sanatorium. It is no less important to secure the co-ordination of the work of the tuberculosis dispensaries throughout the Island with the work of the sanatorium.

65. In the past, three tuberculosis dispensaries, at Nicosia, Limassol and Larnaca, have been in operation. These dispensaries are maintained by a non-official organization, the Cyprus Anti-tuberculosis League, the necessary funds being obtained in part from the public and in part from a Government contribution of £200 a year; in addition, Government pays the part-time salary of the League's medical officer amounting to a further £300 a year. Although the dispensaries have co-operated with the Medical Department, there is no doubt that their separation from the rest of the tuberculosis service has rendered them less useful and effective than they might have been, while the scope of their work has always been limited by the amount of public support received. During recent years, with the general rise in costs, the League has been hard put to it to maintain its dispensary service on the present scale; at the same time, the people of Famagusta and Paphos are pressing for an extension of the service to their towns, an extension which is clearly necessary if the dispensaries are properly to discharge their dual task of securing early notification of the disease and adequate supervision of patients after treatment. The League has therefore recommended that Government shall assume responsibility for the dispensary service and that the League shall, in future, confine its activities to welfare work on behalf of tuberculosis patients and contacts; it is proposed to accept this recommendation.

66. The cost of maintaining the dispensaries, including the opening of new dispensaries at Famagusta and Paphos, is estimated at about £900 a year, excluding the temporary war bonus now being granted. Deducting the subscription of £200 a year made by Government to the League, the net additional cost of the transfer will be £700 a year.

67. The transfer of the League dispensaries to Government and the unification of all the tuberculosis services under the Tuberculosis Officer will mean a great increase in that officer's work, both medical and administrative, and if he is satisfactorily to undertake these responsibilities, he must be provided with a permanent assistant. This assistant would, in particular, be available to take charge of the Kyperounda sanatorium from time to time, thus enabling the Tuberculosis Officer to give adequate attention to organizing and supervising the dispensary service. At present the latter officer is closely tied to Kyperounda and, in the absence of a medical assistant, can leave only for short periods. The cost of the appointment would be only about £100 a year more than the contribution now made to the League in respect of the salary of its part-time officer, bringing the total cost of the transfer to £800 a year.

68. It is the intention that ultimately the tuberculosis dispensary system shall be absorbed in the scheme for Rural Health Units and the health visitors attached to the dispensaries will be utilized to instruct the staff recruited for the units. It would not be possible thus to take advantage of the experience of the League visitors unless the unification proposed took place.

3. PORT HEALTH OFFICE.

69. As stated in paragraph 1, the Medical Department is responsible for port health work, but facilities for the discharge of this duty are almost entirely lacking. The accommodation available at Famagusta, the principal port of entry, is little more than a shed, with the result that disembarking passengers requiring disinfestation have to be taken by lorry, possibly in infested clothing, to the quarantine station at Dhekelia some thirty miles distant.

70. A proper Port Health Office within the port of Famagusta is an urgent need and it is proposed that one shall be provided. It will contain rooms for the routine examination of passengers, apparatus for the disinfestation not only of passengers' clothing but also of hides and of unaccompanied parcels of worn clothing, and a rat control centre, where the apparatus for rat control can be stored. The cost of such a station is estimated at about £6,000.

E.—TRAINING OF STAFF.

71. As has already been stated in paragraph 2, the question of a supply of trained personnel conditions the pace at which any advance can be made in Cyprus in the sphere either of medicine or of public health. The measures which will be taken to train nurses for the public service are explained in paragraph 12, but some time must elapse before the school there proposed, which has yet to be built, begins to turn out nurses and in the meantime other arrangements must be made. There is also a crying need for medical officers, both for general purposes and trained for special duties.

72. An application has already been made under the Colonial Development and Welfare Act to enable these needs to be met. It is proposed that, in the years 1945–46 to 1949–50, twenty secondary schoolboys shall be sent abroad to obtain a full six years' training at Government expense with a view to their employment as medical officers on their return. It is further proposed that twenty-five secondary schoolgirls shall similarly be sent abroad for full training as nurses.

73. A number of qualified Cypriot doctors, who are prepared to enter Government service, will also be sent abroad for general or special training. Ten will be sent for post-graduate training in the United Kingdom, six to Jerusalem for special training in the Ophthalmic Hospital of St. John in Jerusalem, one to the Asfuriyeh Mental Hospital at Beirut to study mental diseases and one to India for training in the treatment of leprosy. A member of the staff of the department will be sent to the Bacteriological Laboratory at Beirut for training as a laboratory technician.

74. It is further proposed that ten nurses shall be sent for training in hospitals in the United Kingdom, eight for ophthalmic training in the Ophthalmic Hospital of St. John in Jerusalem and six for specialised maternity training in the Government Maternity Hospital at Jerusalem.

75. The cost of the scheme is estimated at £60,070; if approval to it is received in time to enable training to begin this year, the amount to be defrayed during the decennium beginning 1946–47 will be about £55,000. The result of the training proposed should be of almost incalculable benefit to Cyprus by producing staff competent to put the recommendations made in this report into effect. Until such staff is available, most of these recommendations are doomed to remain in the project stage.

F.—SUMMARY.

76. As will be seen from the Appendix to this chapter, the total cost of the development of medical and health services during the next ten years is estimated at £913,600. This sum includes £235,400 for the treatment of small but specially afflicted sections of the population, namely, the victims of tuberculosis and insanity. The balance of £678,200 represents the cost of the provision of adequate medical services for the people of Cyprus as a whole and nothing is included in it which is not essential either to the combating of disease or to the proper treatment of the sick.

MEDICAL

APPENDIX

Expenditure proposed on schemes included in the programme.

A.—BY YEARS.

Hospitalization

Year	Nicosia Hospital and Nurses' Home			Limassol Hospital and Nurses' Home			Minor Improvements to Dist. Hospitals	Additional Staff, Kyrenia and Paphos	Larnaca Hospital Extension		
	Capital	Recurring	Total	Capital	Recurring	Total	Capital	Recurring	Capital	Recurring	Total
	£	£	£	£	£	£	£	£	£	£	£
1945–46 ..	—	—	—	—	—	—	—	—	—	—	—
1946–47 ...	63,000	2,000	65,000	—	200	200	5,000	300	—	100	100
1947–48 ...	57,000	2,500	59,500	—	200	200	—	300	—	100	100
1948–49 ...	52,000	3,000	55,000	—	200	200	—	300	—	100	100
1949–50 ...	—	3,500	3,500	—	200	200	—	300	—	100	100
1950–51 ...	—	3,500	3,500	—	200	200	—	300	—	100	100
1951–52 ...	—	3,500	3,500	15,000	200	15,200	—	300	17,000	100	17,100
1952–53 ...	—	3,500	3,500	15,000	200	15,200	—	300	—	100	100
1953–54 ...	—	3,500	3,500	—	200	200	—	300	—	100	100
1954–55 ...	—	3,500	3,500	—	200	200	—	300	—	100	100
1955–56 ...	—	3,500	3,500	—	200	200	—	300	—	100	100
Total 1946–56 ...	172,000	32,000	204,000	30,000	2,000	32,000	5,000	3,000	17,000	1,000	1[illegible],000

Hospitalization

Year	Famagusta Hospital			Kyperounda Sanatorium			Mental Hospital		
	Capital	Recurring	Total	Capital	Recurring	Total	Capital	Recurring	Total
	£	£	£	£	£	£	£	£	£
1945–46 ...	—	—	—	16,500	—	—	—	—	—
1946–47 ...	—	200	200	63,500	1,000	64,500	—	300	300
1947–48 ...	28,700	200	28,900	16,000	1,900	17,900	—	300	300
1948–49 ...	28,700	200	28,900	—	1,900	1,900	—	300	300
1949–50 ...	—	300	300	—	1,900	1,900	62,500	400	62,900
1950–51 ...	—	300	300	—	1,900	1,900	62,500	500	63,000
1951–52 ...	—	300	300	—	1,900	1,900	—	600	600
1952–53 ...	—	300	300	—	1,900	1,900	—	600	600
1953–54 ...	—	300	300	—	1,900	1,900	—	600	600
1954–55 ...	—	300	300	—	1,900	1,900	—	600	600
1955–56 ...	—	300	300	—	1,900	1,900	—	600	600
Total 1946–56 ...	57,400	2,700	60,100	79,500	18,100	97,600	125,000	4,800	129,800

A.—BY YEARS—*continued.*

Year	Rural Health				
	Rural Health Units				
	Capital	Recurring	Total	Recoveries and Savings	Net Total
	£	£	£	£	£
1945–46 ...	25,000	14,000	39,000	10,800	28,200
1946–47 ...	20,000	28,000	48,000	21,600	26,400
1947–48 ...	20,000	42,000	62,000	32,400	29,600
1948–49 ...	10,000	49,000	59,000	37,800	21,200
1949–50 ...	10,000	56,000	66,000	43,200	22,800
1950–51 ...	10,000	63,000	73,000	48,600	24,400
1951–52 ...	10,000	70,000	80,000	54,000	26,000
1952–53 ...	10,000	77,000	87,000	59,400	27,600
1953–54 ...	10,000	84,000	94,000	64,800	29,200
1954–55 ...	—	84,000	84,000	64,800	19,200
1955–56 ...	—	84,000	84,000	64,800	19,200
Total 1946–56 ...	100,000	637,000	737,000	491,400	245,600

Year	Miscellaneous					Staff
	School Medical Service	Tuberculosis Dispensaries			Port Health Office	Training
	Recurring	Recurring	Recoveries and Savings	Net Total	Capital	Recurring
	£	£	£	£	£	£
1945–46 ...	—	1,300	500	800	—	5,100
1946–47 ...	—	1,300	500	800	6,000	6,100
1947–48 ...	2,000	1,300	500	800	—	7,600
1948–49 ...	3,500	1,300	500	800	—	8,300
1949–50 ...	5,000	1,300	500	800	—	9,900
1950–51 ...	6,500	1,300	500	800	—	7,600
1951–52 ...	6,500	1,300	500	800	—	6,100
1952–53 ...	6,500	1,300	500	800	—	4,700
1953–54 ...	6,500	1,300	500	800	—	3,100
1954–55 ...	6,500	1,300	500	800	—	1,600
1955–56 ...	6,500	1,300	500	800	—	—
Total 1946–56 ...	49,500	13,000	5,000	8,000	6,000	55,000

Summary.

Year	Capital	Recurring	Total	*Less* Savings	Net Total
	£	£	£	£	£
1946–47 ...	157,500	39,500	197,000	22,100	174,900
1947–48 ...	121,700	58,400	180,100	32,900	147,200
1948–49 ...	90,700	68,100	158,800	38,300	120,500
1949–50 ...	72,500	78,900	151,400	43,700	107,700
1950–51 ...	72,500	85,200	157,700	49,100	108,600
1951–52 ...	42,000	90,800	132,800	54,500	78,300
1952–53 ...	25,000	96,400	121,400	59,900	61,500
1953–54 ...	10,000	101,800	111,800	65,300	46,500
1954–55 ...	—	100,300	100,300	65,300	35,000
1955–56 ...	—	98,700	98,700	65,300	33,400
Total 1946–56 ...	591,900	818,100	1,410,000	496,400	913,600

B.—BY SCHEMES.

Serial No.	Scheme	Para. of Chapter	Capital	Recurring	Total	*Less* Savings	Net Total
	Hospitalization.		£	£	£	£	£
1	Nicosia Hospital and Nurses' Home	8–14	172,000	32,000	204,000	—	204,000
2	Limassol Hospital and Nurses' Home	15–17	30,000	2,000	32,000	—	32,000
3	Minor Improvements to District Hospitals	18	5,000	—	5,000	—	5,000
4	Additional Staff Kyrenia and Paphos	18	—	3,000	3,000	—	3,000
5	Larnaca Hospital Extension ...	19	17,000	1,000	18,000	—	18,000
6	Famagusta Hospital	20	57,400	2,700	60,100	—	60,100
7	Kyperounda Sanatorium ...	22–31	79,500	18,100	97,600	—	97,600
8	Mental Hospital	32–36	125,000	4,800	129,800	—	129,800
	Rural Health.						
9	Rural Health Units	42–58	100,000	637,000	737,000	491,400	245,600
	Miscellaneous.						
10	School Medical Service ...	59–63	—	49,500	49,500	—	49,500
11	Tuberculosis Dispensaries ...	64–68	—	13,000	13,000	5,000	8,000
12	Port Health Office	69–70	6,000	—	6,000	—	6,000
	Staff.						
13	Training	71–75	—	55,000	55,000	—	55,000
	Total		591,900	818,100	1,410,000	496,400	913,600

Summary.

	Capital	Recurring	Total	*Less* Savings	Net Total
Hospitalization	485,900	63,600	549,500	—	549,500
Rural Health	100,000	637,000	737,000	491,400	245,600
Miscellaneous	6,000	62,500	68,500	5,000	63,500
Staff	—	55,000	55,000	—	55,000
Total	591,900	818,100	1,410,000	496,400	913,600

CHAPTER VI.

EDUCATION.

A.—INTRODUCTORY.

The control which is exercised by the Education Department over public education in Cyprus varies considerably according to the branch of education concerned. In the sphere of elementary education the Governor is by law the central authority, except in so far as he may delegate his powers to local education authorities. Thus all elementary schoolteachers are paid by Government and are under full Government control in respect of appointment, promotion and discipline; the responsibility for providing and maintaining elementary school buildings devolves, however, on the local education authority, usually a Town Committee or a Village Commission, which obtains the necessary finance either in the form of loans from certain education funds or from local education rates. In the case of secondary education, the necessary institutions are provided and the cost of maintaining them is borne by governing bodies, over whom Government exercises in general only a limited control: this control is increased in certain cases where Government makes a grant-in-aid to the school.

2. In addition to discharging on behalf of Government the functions mentioned in the preceding paragraph, the Education Department maintains a Teachers' Training College for elementary schoolmasters, a centre for the training of elementary schoolmistresses, an agricultural school, a secondary school, known as the English School, in Nicosia, and a Reform School.

B.—ELEMENTARY EDUCATION.

3. There are 686 elementary schools in Cyprus of which all but 30 cater for both boys and girls. Of these schools 473 are Greek Orthodox, 203 are Moslem and 10 are Maronite or Armenian. The total number of children enrolled is 54,518, of whom 29,574 are boys and 24,944 are girls. 931 schoolmasters and 407 mistresses are employed in the schools.

4. The ultimate aim of any school system must be the introduction of compulsory elementary education. As no census of the population has been taken since 1931 it is impossible to do more than hazard a guess at the size of the school age population; it is believed to be of the order of 68,000. If this figure is correct, it follows, from the figures of enrolment given in the preceding paragraph, that about 80 per cent. of the school age population is enrolled in the elementary schools. Indeed, it is probably true to say that, in Cyprus, nearly all children attend school for a time but there is a strong tendency to withdraw them before their education is complete. Writing in 1935, Sir Ralph Oakden commented that "the more melancholy fact is that up to 50 per cent. of the children enrolled in the first class of village schools leave within two years, during which time they may not even reach the second class. In many village schools there are no children at all in the three higher classes." As the result of continual propaganda there has been great improvement since these comments were written, but the wastage is still serious and only by the introduction of a compulsory system can it be wholly prevented.

5. Before, however, the introduction of compulsion can even be considered there are certain important defects in the existing system of elementary education which require rectification. Chief among these defects is the excessive size of classes. The average number of pupils per teacher is forty-one, but there are still far too many classes with an enrolment nearer sixty, the approved maximum. Efficient teaching is impossible in such conditions; no class ought to be larger than about forty-five. The first need is, therefore, to fix the size of the standard class at this figure; this reduction will entail the training and addition to the present staff of about 400 masters and mistresses.

6. The Education Department maintains a Teachers' Training College at Morphou for the training of elementary schoolmasters. The college was designed to accommodate 48 students. By temporary expedients, it has been made to hold 70 students, though the staff has not been increased. In order to cope with the demand for more masters and generally to raise the standard of teaching it is proposed that the college shall be enlarged so as to hold 120 students, that all students shall be required to spend at least three years in college (at present, one year of the training is obtained outside) and that adequate instructional staff shall be provided. The capital cost of the extension of the college is estimated to be about £80,000 and the cost of additional instructional staff will be about £5,500 a year.

7. Under present arrangements, which were never intended to be more than temporary, elementary schoolmistresses receive their training during a period of probation. During this period, they spend about four days a week either in watching other teachers or in teaching under supervision and two days a week in attending lectures at a temporary non-residential centre organized by Government for the

purpose. This system is far from satisfactory and there is urgent need for the establishment of a proper Women's Training College, where systematic instruction can be imparted. It is proposed that such a college shall be provided. It will contain accommodation for 120 students in three classes of 40 each, the full course extending over three years. The capital cost of the college will be about £100,000 and the cost of staffing it will be about £10,400 a year. There will be a saving of £1,400 a year, the amount now being provided for the temporary centre, reducing the net additional recurring cost to £9,000 a year.

8. Even with these two colleges in full operation, the process of turning out the 400 additional teachers necessary to enable the present classes to be reduced to a reasonable size will be a slow one. If the extension of the men's and the construction of the women's college are taken in hand in 1946–47 and finished in about eighteen months, the first of the new masters and mistresses will not emerge fully trained until about 1950–51. The annual output from the two colleges will be 35 men and 40 women (it is desirable that some of the men should undergo a fourth year of training to fit them for specialized duties), but of these about 15 men and 25 women will be necessary to make up wastage in the existing establishment. Only 20 men and 15 women will represent actual additional staff. It will thus take about eleven or twelve years from the time when the first batch of students emerges (or about fifteen or sixteen years from the inauguration of the scheme) before the necessary 400 additional teachers will be available. About half this number will be produced during the decennium.

9. The cost of the employment of these additional teachers will rise from £2,300 in 1950–51 to £17,200 in 1955–56, the total provision required during the decennium being £56,500. The annual addition to the present salary bill in 1961–62, when the full 400 masters and mistresses will have been added to the staff, will be about £40,000.

10. This increase in the number of elementary schoolmasters and mistresses will entail consequential expenditure in other directions, particularly in the matter of buildings. As already mentioned, the local education authority is, under present arrangements, responsible for the provision and maintenance of all elementary school buildings. It is unnecessary for the purpose of this report to describe the origin of the education funds which render such a system possible; it will suffice to say that such funds exist and that loans from them are made to the local education authorities to enable them to finance the construction of new schools, teachers' residences and the like. The cost of the maintenance of such buildings and of the interest payable on any loans received is found from the proceeds of a rate levied by the education authority on the inhabitants of the area within its jurisdiction. Interest accruing to the funds is used for the purpose of making free grants for the construction of educational buildings in the poorer villages which could not otherwise afford them.

11. The amount available for such grants is very limited, with the consequence that, in many of the poorer villages, the schoolbuildings are old-fashioned, inconvenient and unhealthy and no proper housing is available for the teachers. There are thus two requirements to be met, the replacement of these unsuitable buildings and the construction of teachers' quarters (as part of the general policy of setting the existing house in order) and the provision of the additional school-rooms and residences rendered necessary by the reduction in the size of classes and by the appointment of four hundred additional teachers. About 550 school-rooms and 700 teachers' residences are needed, while some 600 school latrines will have to be provided or enlarged. No detailed estimate of the cost of this programme has been prepared but, at present rates, it is likely to be of the order of £400,000.

12. Seeing that many villages have difficulty in meeting their existing obligations, it is certain that, without substantial direct help from Government, they will be quite unable to finance this programme except over a very long period. It is therefore proposed that, as in the case of new irrigation works, part of the amount shall be found by the local authority and part given in the form of free grants, the proportion differing from place to place in accordance with the capacity of the local authority to pay.

13. The programme will extend over sixteen years and it is suggested that it shall be financed as to £200,000 from education funds, as to £40,000 by grants from such funds and as to £160,000 by grants from Government, at the rate of £10,000 a year. A sum of £100,000 will thus have to be earmarked for the last-mentioned purpose during the decennium. The present education funds will require strengthening, but this should present little difficulty as any amount advanced to the funds will be steadily liquidated by the annuities paid on their loans by the local authorities.

14. School building work is usually done by contract under the supervision of the Education Department and the building programme envisaged will necessitate an increase in the department's school building supervisory staff, at a cost of £900 a year or of £9,000 during the decennium. With the increased number of teachers the inspection staff will have to be strengthened: the total increase during the decennium will be £9,600.

15. Details of the expenditure proposed on the reorganization of elementary education in Cyprus are given in the statements in the Appendix to this chapter. The total cost of the reorganization will be as follows during the decennium:—

	£
Teachers' Training College	124,000
Women's Training College	172,000
Pay of additional teachers	56,500
Building grants	100,000
Inspectorates	18,600
Total	£471,100

16. It was stated in paragraph 4 that the ultimate aim of any school system must be the introduction of compulsory elementary education. The possibility of such introduction must be viewed in the light of the figures already quoted. To enable a compulsory system to be operated, a further 600 teachers would be required, and two more Training Colleges, one for men and one for women, would be needed for their production, each college costing £100,000 to construct and about £10,000 a year to maintain. The annual additional bill for teachers' salaries would be increased from the figures given in paragraph 9 to £43,000 in 1955–56, to £100,000 in 1961–62 when the cadre would be filled and subsequently, by increments, to £125,000. A very large sum would also be required for school buildings. Both the headquarters and the inspectoral staff of the department would require considerable strengthening in order to enable it to cope with the additional work. In all, the capital cost of introducing compulsory education would probably not be less than a million pounds while the ultimate additional recurring cost would be of the order of £170,000 a year. Even if the capital cost of the scheme could be found, there can be no guarantee that the Government of Cyprus will be in a position to meet, from its ordinary revenues and without starving other services, the high recurring charge with which it would be faced when the Colonial Development and Welfare Act expires.

17. For these reasons it is considered that compulsory elementary education must, for the time being at least, be regarded as outside the sphere of financial practicability and that attention should be directed to the better ordering of the present system. It is at the moment more important to improve the unsatisfactory conditions of education of those who attend school voluntarily than to attempt to bring more pupils into the schools, nevertheless provision for compulsory education is essential and should be introduced as from the first class of the elementary schools towards the end of the decennium.

C.—SECONDARY EDUCATION.

1. GENERAL.

18. There are 43 secondary schools in Cyprus, of which 14 are for boys, 9 for girls and 20 are mixed. 27 of these schools are Greek-Orthodox, 6 are Moslem, 3 are Armenian and 7 are open to all denominations. 22 of the schools receive a Government grant (the total sum thus to be granted in 1945 amounts to £26,000) while 21 operate unaided. Government grants are given to 10 of the boys' schools, 3 of the girls' schools and 9 of the mixed schools.

19. 7,657 pupils attend the secondary schools, of whom 5,750 are boys and 1,907 girls. 287 masters and 101 mistresses form the teaching staff.

20. Secondary schools in Cyprus are managed by governing bodies which obtain their finance from pupils' fees, from public donations and, in certain cases, from Government grants. The Education Department exercises a certain limited control over all such schools. The schools must be registered, the premises must not be insanitary, none but registered secondary school teachers may be employed in them, books which are seditious, immoral or educationally unsound must not be used, and so on. The department has power to inspect all secondary schools and to enforce these and other requirements. But the primary responsibility for the management of the schools rests with the governing bodies who can, of course, only discharge it within the limits of their financial means. Where Government gives a grant-in-aid, the powers of control exercised by the department are correspondingly widened.

21. No specific provision is made in the programme for the general reorganization of secondary education. Before anything is done in this direction, there must be some agreement between Government and the governing bodies as to the methods of sharing both responsibility and expense. The solution may possibly lie in empowering the governing bodies of secondary schools to raise local rates (on the lines of those raised by Town Committees and Village Commissions in the case of elementary education) and in the introduction of a joint system of responsibility under which bodies so

empowered would admit a reasonable measure of Government control in return for Government grants. It seems clear that, if they are to be effective, these grants will have to be large, as a great deal is needed to put the institutions into a satisfactory condition ; a considerable financial issue will thus be raised. It is, however, useless to attempt to evaluate the extent of this issue or to discuss means of meeting it until it has been shown that the political side of the question is susceptible of settlement and that a new and more satisfactory policy can be evolved to govern the relations between Government and the local authorities.

2. ENGLISH SCHOOL, NICOSIA.

22. Until 1936, the English School at Nicosia, a secondary school for Cypriot boys, was under private management ; in that year it passed into the possession of the Government. It is managed by a Board of Management and Control nominated by the Governor, and the Principal and seven of the masters are officers of the Education Department. Government gives the Board such annual grant as is necessary to balance its budget as approved by the Director of Education. For all practical purposes, the school may be regarded as a branch of the Education Service. Under the law in which its constitution is enshrined, the chief medium of instruction is English and the character of the school Christian but undenominational with facilities for all pupils (including Moslems) to practise their own form of religion.

23. The school draws its pupils from all parts of the Island and from all sections of the population. It is becoming more and more the source to which the Colony looks for intelligent and progressive recruits to the civil service, the professions and public life. A great part of its training is given outside the class room : on the playing fields, through the Boy Scouts and multifarious school societies, and in community life. The home conditions of most pupils are such as make this training all the more important and impossible to achieve unless they are boarders.

24. While under private management the school made very inadequate provision for boarders. Although then, as now, pupils came from all over Cyprus, nearly all except those who were resident in Nicosia lived in lodgings in the town and suburbs and little supervision or control of their living conditions and activities outside school hours was attempted or, indeed, possible. The disadvantages of such an arrangement are too obvious to require comment and it has now been accepted as a rule, both by the Board and by the parents of the boys, that all boys not living with their parents or with relatives should become boarders.

25. The main difficulty in the way of giving effect to this rule is the shortage of accommodation. The new school buildings, which were constructed between 1936 and 1941 on a hill outside the town, consist of a classroom block, a boarding house, a headmaster's house and a number of temporary huts. So great recently has been the demand for boarding accommodation that not only are the boarding house and the huts filled to their utmost capacity but half the headmaster's house and a wing of the classroom block have been converted for the use of boarders. The latter expedient is only possible owing to the decline in the total number of pupils due to the enforced evacuation of the school to Kyrenia during the years 1941 to 1943. The number is now, however, rapidly recovering.

26. An enlargement of the school is urgently necessary and it is now proposed to make it capable of taking from 400 to 450 boys in place of the 270 boys who are there at present. In order to provide for all boys who are not living with their parents, accommodation for boarders will have to be increased from 140 to 270 places.

27. The scheme for the enlargement of the school includes the building of three additional boarding houses (for which an extension of the existing grounds will be necessary), the erection of three residences for married masters and the construction of assembly rooms, comprising also a sports pavilion, changing rooms and a sanitary block. The total capital cost of the scheme is estimated at £148,000, and the enlargement of the school will involve the employment of additional staff costing about £1,200 per annum. A grant of £48,000 has already been approved under the Colonial Development and Welfare Act (D.496) to cover the expense of erecting the first additional boarding house ; the capital amount to be defrayed during the decennium on the remainder of the scheme will thus be £100,000.

3. VILLAGE HIGH SCHOOLS.

28. There is a further branch of secondary education which stands in need of development, namely, rural as distinct from urban secondary education. At present too many village boys, who desire to proceed beyond the elementary standard, are forced by the lack of alternative facilities to attend the urban schools, with the result that not only is the boy himself urbanized but that he obtains an education quite unsuited to his needs. There are at present eight village high schools in Cyprus, some State-aided and some not, and it is proposed that eight more, each accommodating about 150 pupils, shall be established during the decennium. The education imparted will have a rural bias but will not be of a vocational agricultural nature such as will be imparted in the agricultural schools referred to in paragraphs 39 to 43 of this chapter. The establishment of these schools (in conjunction with the schools already existing) will bring secondary education of a non-urban type within the reach of all village boys desiring and capable of profiting from it.

29. The cost of each school will be about £5,000 and the annual cost of its maintenance about £1,000; the total cost of the scheme during the decennium will be about £76,000. The new schools should be directly controlled by Government, but an attempt should be made to devise a system under which a local authority will be associated with Government both in their management and in the provision of the necessary funds.

D.—TECHNICAL EDUCATION.

1. APPRENTICES TRAINING CENTRE.

30. Up to the present practically no facilities have been provided in Cyprus for the training of craftsmen. In consequence, the standard of performance is low; both Government and private firms have had to depend upon tradesmen and foremen trained in the rule of thumb school and there is a very real need for men with proper practical training and some theoretical background. The position is made worse by the fact that there is no organized system of apprenticeship in the Colony.

31. It is now proposed to remedy this defect in so far as mechanical and electrical engineering and the allied trades are concerned by introducing a unified apprenticeship system for apprentices employed by Government and by such private firms as are prepared to participate in the scheme and by combining practical training in workshops with theoretical instruction in an appropriate institution.

32. The scheme envisages the annual output of about 20 trained apprentices, of whom 10 will be employed by Government and 10 in the workshops of private firms. An Apprentices' Training Centre will be established by Government where theoretical instruction will be imparted *pari passu* with the workshop training. Apprentices will be paid at rates rising from 19*s*. a week during the first year of apprenticeship to 32*s*. a week during the fifth and last year; in order to secure proper control over the training imparted, Government will bear half the cost of the pay of the apprentices indentured to private undertakings and firms. For the first two years, the apprentices will devote half their time to practical training and half to theoretical instruction in the Centre; during this period the education imparted at the Centre will be of a general character. During the last three years of apprenticeship the hours of instruction in the Centre will be reduced and there will be special syllabuses for electrical wiremen, electric power station attendants, fitting and motor mechanics, fitters and erectors, and blacksmiths. The closest association will be maintained between theory and practice, and between the personnel engaged in the classrooms and that engaged in the various workshops where the apprentices will do their practical work.

33. The total amount to be defrayed during the decennium on account of the pay of apprentices will be about £38,700. The capital cost of the Centre will be about £3,900; the cost of its maintenance will increase from £700 in the first year to £2,900 in the fifth and will involve an expenditure during the decennium of £23,400.

2. EVENING CLASSES.

34. It is further proposed that evening classes shall be instituted in connection with the Apprentices' Training Centre, which young men who are already in either Government or private employment can attend with a view to improving their qualifications. The cost will be small, rising from £200 in the first to £300 in the third and subsequent years, and totalling about £2,800 during the decennium.

3. TECHNICAL EDUCATION COMMITTEE.

35. A Committee, composed of both officials and non-officials, is now sitting to discuss the needs of Cyprus in respect of technical education; the establishment of the Apprentices' Training Centre and the institution of Evening Classes were recommended in an *ad interim* report of this Committee. Until the final report of the Committee is received, it is impossible to say whether and, if so, to what extent further expenditure under this head will be necessary.

E.—AGRICULTURAL EDUCATION.

36. The Rural Central School at Morphou was opened in September, 1940. Its object is to produce good practical farmers. It has accommodation for 40 pupils and the course extends over two years. Candidates for admission must be 15 years old, have completed the full course of a village elementary school and have worked on their own or their families' land for two years after leaving the elementary school. The training given is intended to qualify the pupils to return to their fathers' land with such improved practical knowledge as will enable them to lead a more profitable agricultural life.

37. The pupils live in five houses which, with the school building, stables and stores, form a small model village. The houses are of ordinary Cyprus types, incorporating such simple and inexpensive improvements in construction and fittings as any villager could adopt. The farm buildings are of a simple and economical standard but again incorporate numerous devices which should not be beyond the reach of a progressive village farmer. The livestock includes all animals normally kept in Cyprus, and there is a workshop in which pupils learn how to make and repair farm implements and furniture. The farm land comprises about 40 acres, excluding building sites, and on it farm crops, vegetables and trees are raised.

38. The central feature of the model village is the school building, similar in design and construction to an ordinary village school. About a third of the pupils' time is devoted to higher education in their own language and in English, modern history and geography, arithmetic and the keeping of farm accounts. The remainder of their time is occupied in practical work on the farm and in the secondary activities connected with it.

39. It has always been the intention that the Rural Central School should be merely the first of a series of agricultural schools serving the needs of different parts of the Island. The value of such schools, as leading to the production of a better educated and more progressive village farmer, is great and it is much to be hoped that it may be possible to establish six further schools of the same type during the decennium.

40. Unfortunately the high prices now obtaining for land have rendered such establishment an expensive matter; at present rates, each school would probably cost about £20,000, or more than three times what it would have cost prior to the war. It is hoped that there may be a fall in these prices during the decennium and it is therefore proposed to make provision in the programme for only three new schools, to be built, respectively, in 1947–48, 1950–51 and 1953–54. Each school will cost about £2,000 a year to maintain, and the total sum required to cover both capital and recurring expenditure during the decennium will be about £96,000. Should prices fall, any balance from this provision will be used for the establishment of further schools up to a total number of six.

F.—JUVENILE DELINQUENCY.

1. REFORM SCHOOL.

41. Until recently, juvenile delinquents were accommodated, together with juvenile adults, in a reformatory at Athalassa under the control of the Inspector of Prisons. This system was obviously unsatisfactory and it was decided that, on both moral and psychological grounds, it was essential to remove the juveniles away from the Athalassa environment and association and to place them under the control of the Education Department. A suitable site for a new Reform School was found on the edge of the sea near Lapithos, where a hotel was available for lease, and the school was established there late in 1943.

42. At the time of the transfer it was assumed (on the basis of the records of previous admissions) that the population of the school, boys and masters, would not exceed 40. But, as the advantages of the transfer became more apparent, the Courts began to make increasing use of the school and by March, 1945, 53 boys and 6 adults were living there, while the Courts were continuing to send juveniles at a much higher rate than that at which they were discharged.

43. It has been decided that no more suitable site for the Reform School could possibly be found than that which it at present occupies but the building urgently requires enlargement unless Government is to face the undesirable alternative of asking the Courts to cease sending juveniles to the School. An application has therefore already been made for a grant under the Colonial Development and Welfare Act to enable the site and the existing buildings to be acquired, the main building to be converted into a class room and dining block, two residential blocks containing dormitories to be constructed and a detached house for the headmaster to be built. A further area of land will also be purchased. The school, as thus enlarged, is designed to house 64 boys, 6 resident masters or craft instructors, and servants. The cost of the scheme is estimated at £50,000; if approval is received in time, it is hoped that £35,000 will be spent this year, leaving the balance of £15,000 to be defrayed during the decennium.

44. As will be seen from the statement in paragraph 49, it is proposed to send the headmaster and his wife for a year's special training in England with a view to the former resuming his appointment and the latter assuming that of matron of the institution on the completion of their course.

2. PROBATION SERVICE.

45. The establishment of the Reform School cannot, however, in itself provide the complete answer to the problem of delinquency among the boys and youths of the Colony. There are bound to be many cases which cannot be suitably dealt with by the reformatory. Moreover, the school itself cannot achieve its best effect without the means of ensuring that on release the boys are not again exposed to the influences

which the school has sought to correct. The time has undoubtedly come when it is necessary to establish a special branch of the public service which will embrace probation as well as reformatory work and the after-care of boys released from the reform school will be an important feature of this work.

46. It has already been arranged that an experienced officer from England shall be appointed to organize this new service, not only because the work is of a specialized nature but also because it is essential that, from the outset, the service shall command the respect and enjoy the confidence of the public and the Courts. It is the intention that the British officer shall select and train suitable Cypriots as Probation Officers.

47. Pending the arrival of the British officer and the result of his survey of conditions, it is impossible to say exactly what form the probation service will take or what staff will be required to man it. But, having regard to the sum which is likely to be available for educational development as a whole, there must clearly be a limit to the amount which can be spent on the comparatively small section of the youth of Cyprus represented by the juvenile delinquent. For the purpose of the programme it is proposed to include, on account of the probation service, a sum of £2,000 in 1946–47 rising to £6,000 in 1949–50 and during each of the remaining years of the decennium. On this basis, the total cost of the service during the decennium will be £52,000.

3. OTHER REFORMATORY INSTITUTIONS.

48. There is a lack in Cyprus of several of the reformatory institutions which are usually found in more advanced countries, such as a girls' reformatory school, a senior boys' reformatory school to accommodate juvenile adults and boys from the Reform School after they attain a certain age, and a remand home, which would serve as an approved residence for juveniles on probation in need of care and protection or released from the Reform School on licence. When the officer mentioned in paragraph 46 has arrived and the Probation Service has been formed, one or more of these institutions may be found to be essential for the proper development of the activities of the latter. If so, the question of its provision will then have to be considered but it is not proposed, in the meantime, to include in the programme any reformatory institution other than the boys' Reform School already described.

G.—STAFF.

1. TRAINING.

49. An application has already been made for a grant of £38,300 under the Colonial Development and Welfare Act to enable 51 Cypriots, 36 men and 15 women, to be trained in England for subsequent employment in the Education Department. The standing of the candidates, and the posts which they are to be trained to fill, are given in the statement below :—

No.	*Candidate.*	*Prospective Post.*	*Years of Training.*
		MEN.	
4	Elementary Schoolmaster ..	Lecturer, Teachers' Training College	3
6	do.	Master, Agricultural School	3
1	do. ..	Lecturer, Teachers' Training College	1
8	do.	Organizing Teacher	1
1	Master, Agricultural School ..	Lecturer, Teachers' Training College	3
1	Headmaster, Reform School ..	Headmaster, Reform School	1
11	Secondary Schoolboy	Secondary Schoolmaster	3
		WOMEN.	
4	Elementary Schoolmistress ..	Lecturer, Women's Training College	2
3	do. ..	Organizing Teacher	1
1	Wife of Headmaster, Reform School	Matron, Reform School	1
5	Secondary Schoolgirl	Secondary Schoolmistress	3
2	do.	do.	2

If approval to the scheme is received in time, it is hoped that training will begin in 1945–46, leaving an expenditure of £29,900 to be defrayed during the decennium.

2. ADDITIONAL HEADQUARTERS STAFF.

50. The implementation of the programme described in this chapter will necessitate a small strengthening of the headquarters staff of the department. The cost of this additional staff will rise from £100 a year at the beginning to £300 at the end of the decennium and necessitates a provision of £2,000 during the period.

3. SPECIALIST STAFF.

51. Although physical training and domestic science are included in the curricula of the Teachers' Training Colleges, there is a need of specialists in these subjects whose duty will be to supervise their teaching in the elementary schools. It is therefore proposed that 3 female inspectors, costing in all £900 a year, to develop domestic science and 3 specialist inspectors of physical training, costing in all £1,000 a year, shall be added to the staff of the department. A unique opportunity of obtaining suitable candidates for the latter posts will shortly present itself as certain fully trained physical instructors in the Cypriot Forces will become available on demobilization.

H.—SUMMARY.

52. As shown in the Appendix to this chapter, the total amount which it is proposed to spend on the development of education during the decennium is £940,000. It is divided as follows among the various branches of educational work :—

	£
Elementary Education	471,100
Secondary Education	186,200
Technical Education	68,800
Agricultural Education	96,000
Juvenile Delinquency and Welfare	67,000
Training and Employment of Staff	50,900
Total	£940,000

Having regard to the present state of development in Cyprus and to the fact that three quarters of the population resides in the rural areas and is primarily dependent on agriculture for its livelihood, the apportionment suggested appears to be as reasonable a one as can be devised.

EDUCATION

APPENDIX

Expenditure proposed on schemes included in the programme.

A.—BY YEARS.

Year	Elementary Education										
	Teachers' Training College			Women's Training College					Pay of Teachers	Building Grants	Inspectorates
	Capital	Recurring	Total	Capital	Recurring	Total	*Less* Savings	Net Total	Recurring	Capital	Recurring
	£	£	£	£	£	£	£	£	£	£	£
1945–46	—	—	—	—	—	—	—	—	—	—	—
1946–47	40,000	—	40,000	50,000	—	50,000	—	50,000	—	10,000	1,600
1947–48	40,000	—	40,000	50,000	—	50,000	—	50,000	—	10,000	1,600
1948–49	—	5,500	5,500	—	10,400	10,400	1,400	9,000	—	10,000	1,600
1949–50	—	5,500	5,500	—	10,400	10,400	1,400	9,000	—	10,000	1,600
1950–51	—	5,500	5,500	—	10,400	10,400	1,400	9,000	2,300	10,000	1,900
1951–52	—	5,500	5,500	—	10,400	10,400	1,400	9,000	4,900	10,000	1,900
1952–53	—	5,500	5,500	—	10,400	10,400	1,400	9,000	*7,700	10,000	1,900
1953–54	—	5,500	5,500	—	10,400	10,400	1,400	9,000	10,600	10,000	1,900
1954–55	—	5,500	5,500	—	10,400	10,400	1,400	9,000	13,800	10,000	2,300
1955–56	—	5,500	5,500	—	10,400	10,400	1,400	9,000	17,200	10,000	2,300
Total: 1946–56	80,000	44,000	124,000	100,000	83,200	183,200	11,200	172,000	56,500	100,000	18,600

Year	Secondary Education						Technical Education				
	English School			Village High Schools			Pay of Apprentices	Apprentices' Training Centre			Evening Classes
	Capital	Recurring	Total	Capital	Recurring	Total	Recurring	Capital	Recurring	Total	Recurring
	£	£	£	£	£	£	£	£	£	£	£
1945–46	48,000	—	48,000	—	—	—	—	—	—	—	—
1946–47	50,000	300	50,300	—	—	—	800	1,500	700	2,200	200
1947–48	50,000	600	50,600	5,000	—	5,000	1,600	600	1,200	1,800	200
1948–49	—	900	900	5,000	1,000	6,000	2,600	600	1,800	2,400	300
1949–50	—	1,200	1,200	5,000	2,000	7,000	3,700	600	2,300	2,900	300
1950–51	—	1,200	1,200	5,000	3,000	8,000	5,000	600	2,900	3,500	300
1951–52	—	1,200	1,200	5,000	4,000	9,000	5,000	—	2,900	2,900	300
1952–53	—	1,200	1,200	5,000	5,000	10,000	5,000	—	2,900	2,900	300
1953–54	—	1,200	1,200	5,000	6,000	11,000	5,000	—	2,900	2,900	300
1954–55	—	1,200	1,200	5,000	7,000	12,000	5,000	—	2,900	2,900	300
1955–56	—	1,200	1,200	—	8,000	8,000	5,000	—	2,900	2,900	300
Total: 1946–56	100,000	10,200	110,200	40,000	36,000	76,000	38,700	3,900	23,400	27,300	2,800

A.—BY YEARS—*continued.*

Year	Agricultural Education			Juvenile Delinquency and Welfare		Staff		
	Agricultural Schools			Reform School	Probation Service	Training	Head-quarters Staff	Specialist Staff
	Capital	Recurring	Total	Capital	Recurring	Recurring	Recurring	Recurring
	£	£	£	£	£	£	£	£
1945–46 ...	—	—	—	35,000	1,000	8,400	—	—
1946–47 ...	—	—	—	15,000	2,000	8,900	100	1,900
1947–48 ...	20,000	2,000	22,000	—	3,000	7,500	100	1,900
1948–49 ...	—	2,000	2,000	—	5,000	5,100	100	1,900
1949–50 ...	—	2,000	2,000	—	6,000	4,400	200	1,900
1950–51 ...	20,000	4,000	24,000	—	6,000	2,600	200	1,900
1951–52 ...	—	4,000	4,000	—	6,000	1,400	200	1,900
1952–53 ...	—	4,000	4,000	—	6,000	—	200	1,900
1953–54 ...	20,000	6,000	26,000	—	6,000	—	300	1,900
1954–55 ...	—	6,000	6,000	—	6,000	—	300	1,900
1955–56 ...	—	6,000	6,000	—	6,000	—	300	1,900
Total 1946–56 ...	60,000	36,000	96,000	15,000	52,000	29,900	2,000	19,000

Summary.

Year	Capital	Recurring	Total	*Less* Receipts	Net Total
	£	£	£	£	£
1946–47 ...	166,500	16,500	183,000	—	183,000
1947–48 ...	175,600	19,700	195,300	—	195,300
1948–49 ...	15,600	38,200	53,800	1,400	52,400
1949–50 ...	15,600	41,500	57,100	1,400	55,700
1950–51 ..	35,600	47,200	82,800	1,400	81,400
1951–52 ...	15,000	49,600	64,600	1,400	63,200
1952–53 ...	15,000	52,000	67,000	1,400	65,600
1953–54 ...	35,000	58,000	93,600	1,400	91,600
1954–55 ...	15,000	62,600	77,600	1,400	76,200
1955–56 ...	10,000	67,000	77,000	1,400	75,600
Total 1946–56 ...	498,900	452,300	951,200	11,200	940,000

B.—BY SCHEMES.

Serial No.	Scheme	Paragraph of chapter	Capital	Recurring	Total	*Less* Receipts	Net Total
	Elementary Education.		£	£	£	£	£
1	Teachers' Training College ...	6	80,000	44,000	124,000	—	124,000
2	Women's Training College ...	7	100,000	83,200	183,200	11,200	172,000
3	Pay of Teachers	8–9	—	56,500	56,500		56,500
4	Building Grants...	10–13	100,000	—	100,000		100,000
5	Inspectorate	14	—	18,600	18,600		18,600
	Secondary Education.						
6	English School	22–27	100,000	10,200	110,200	—	110,200
7	Village High Schools	28–29	40,000	36,000	76,000	—	76,000
	Technical Education.						
8	Pay of Apprentices	30–33	—	38,700	38,700	—	38,700
9	Apprentices' Training Centre ...		3,900	23,400	27,300	—	27,300
10	Evening Classes	34	—	2,800	2,800	—	2,800
	Agricultural Education.						
11	Agricultural Schools	36–40	60,000	36,000	96,000	—	96,000
	Juvenile Delinquency & Welfare.						
12	Reform School	41–44	15,000	—	15,000	—	15,000
13	Probation Service	45–47	—	52,000	52,000	—	52,000
	Staff.						
14	Training	49	—	29,900	29,900	—	29,900
15	Headquarters Staff	50	—	2,000	2,000	—	2,000
16	Specialist Staff	51	—	19,000	19,000	—	19,000
	Total		498,900	452,300	951,200	11,200	940,000

Summary.

	Capital	Recurring	Total	*Less* Receipts	Net Total
Elementary Education	280,000	202,300	482,300	11,200	471,100
Secondary Education	140,000	46,200	186,200	—	186,200
Technical Education	3,900	64,900	68,800	—	68,800
Agricultural Education	60,000	36,000	96,000	—	96,000
Juvenile Delinquency and Welfare ...	15,000	52,000	67,000	—	67,000
Staff	—	50,900	50,900	—	50,900
Total	498,900	452,300	951,200	11,200	940,000

CHAPTER VII.

ANTI-MALARIAL WORK.

Malaria is the scourge of Cyprus and the general debility caused by this disease is one of the chief obstacles to progress in education, agriculture and general welfare in the rural areas. The annual economic loss to the Colony, due to the disease, must run into hundreds of thousands of pounds.

2. That the disease can eventually be brought under control is shown by the success of certain works which were undertaken during the years 1937–39 in ten villages in a typical area, 20 miles long and 5 or 6 miles wide. In 1937, the blood parasite index in this area was 69.9 per cent.; control work started in 1938 and the index was lowered to 41.7 per cent.; further control work was carried out in 1939 and the incidence fell again to 16.5 per cent. Had sufficient funds, staff and materials been available, a greater reduction in the index, and possibly even the complete eradication of the anopheles vector, and therewith of malaria from the area, could have been achieved, but many potential breeding places, outside the normal control areas but in the vicinity of small settlements, had to be left unattended and from these places the anopheles mosquito filtered into the control areas and infected with malaria the people working there.

3. Early in 1944 a Malaria Board was constituted and it was decided to put into effect an initial programme of works based on the surveys and trials carried out in Cyprus by the Rockefeller Foundation between 1935 and 1939. 32 projects were prepared, the works being designed to eliminate the most dangerous mosquito-breeding places in the Western Mesaoria and in the Larnaca and Kyrenia Districts, which are notoriously malarious areas. The plans provided for the drainage of stagnant water and the canalization and control of running water in order to prevent the formation of pools and swamps; the schemes proposed comprised the construction of earth and masonry channels, weirs and tanks, the improvement of springs and the repair of existing works dangerous to public health. The cost of this initial programme was estimated at £103,180 and a grant of this amount was approved (D.390) under the Colonial Development and Welfare Act to enable it to be implemented. In the application for the grant it was explained that the programme related only to the years 1944–45 to 1946–47 and did not by any means exhaust the requirements of malarial control over the whole Island. It was merely a first list of schemes designed to deal with the problem in the very worst areas, and thereafter supplementary schemes would be required.

4. Had matters remained in this stage, it would probably have been necessary to include in the development programme a sum of the order of from £30,000 to £50,000 annually throughout the decennium for anti-malarial works. Before, however, more than a couple of thousand pounds had been spent from the grant, the whole conception of malarial control was changed as the result of a visit by a senior officer of the Medical Department to Egypt where he was able to see the excellent results obtained by the Egyptian Government in the eradication of *Anopheles gambiae*, using larvicides and insecticides. The work in Egypt has been carried out in co-operation with the Rockefeller Foundation staff, who have had previous experience of the eradication of *Aedes aegypti* and *Anopheles gambiae* from Brazil. Subsequently Dr. Fred L. Soper, who is in charge of the activities of the Rockefeller Foundation in the Middle East and who personally directed the eradication works in Brazil and Egypt, paid a visit to Cyprus. After inspecting the most malarious portions of the Island, Dr. Soper expressed the opinion that it was possible to effect the species eradication of all anopheles from Cyprus within a space of two years, thus ridding the Island of malaria vectors. He considered that Cyprus afforded an exceptionally favourable field for work of this kind.

5. Dr. Soper estimated the cost of the necessary measures at £400,000. The Director of Medical Services and his staff are, however, of the opinion that the work can be done for a somewhat smaller sum than that proposed by Dr. Soper as there is already in existence a well-organized and experienced anti-malarial service which, with some re-arrangement and addition, could begin work at once.

6. It was further suggested that a beginning should be made this year by eradicating all anopheles from the whole of the Karpass peninsula lying east of Lefkoniko and Akanthou, an area 50 miles long and from 12 to 5 miles wide. This work would serve as a demonstration and as a training ground for the additional staff which will be required for an Island-wide campaign. The cost of this localized operation is estimated at about £20,000.

7. It is realized that the task of eradicating malaria in Cyprus may, in some respects, be more difficult than it has proved to be in Egypt. The breeding habits and flight range of *Anopheles superpictus* and some of the other anopheles vectors in Cyprus are less tractable than those of *Anopheles gambiae* and the topographical features of the Island present problems which are absent in the flat land of Egypt. But there is no reason to believe that these difficulties cannot be surmounted. On the other hand, the domestic habits of

certain Cyprus anopheles, especially *superpictus*, offer advantages, such as that presented by the complete cessation of breeding for from three to four months, during which period it is possible to kill off the hibernating adult female mosquito in houses, stables and other hiding places by the use of the insecticide dichloro-diphenyl trichloroethane, commonly known as D.D.T. or pyrethrum insecticide. It is known that one spray of D.D.T. may be effective for several months.

8. It now seems certain that the correct approach to the elimination of malaria in Cyprus is through the eradication of the anopheles vectors rather than by the construction of drainage or canalization works and that the former method is likely to prove both cheaper and much more speedy than the latter. The Malaria Board is unanimous in recommending that the method of species eradication should be adopted and put into operation at the earliest possible moment.

9. In certain areas, such as the marshy areas bordering on Morphou Bay, preliminary drainage would considerably assist the eradication scheme by making it possible to apply the larvicides more easily. It is proposed that, in addition to the operations in the Karpass peninsula described in paragraph 6, £10,000 shall be spent this year on drainage operations in the Morphou Bay area. For the rest, the time will be spent in organizing a great campaign for 1946–47. The necessary staff will be trained, an adequate supply of materials such as larvicides and insecticides will be collected, and every effort made to secure the co-operation of municipalities and of the countryside. It is hoped that, by vigorous propaganda, it may be possible to stimulate not merely a campaign but a crusade against malaria. The operations envisaged in 1946–47 will probably cost £250,000 and the work should be completed by an expenditure of £50,000 in 1947–48.

10. Following the completion of the eradication measures, it will be necessary to maintain a small service to deal with local problems such as the inspection of ships and planes arriving from other countries with a view to the prevention of the re-introduction of anopheline mosquitos and to be ready to eradicate any species discovered in any part of the Island before the insect has had time to establish itself. The cost of the necessary service should not exceed £3,000 a year.

11. The total cost during the decennium of anti-malarial work on the lines proposed will thus be £324,000, to be incurred as follows:—

Year	Capital	Recurring	Total
	£	£	£
1945–46	10,000	20,000	30,000
1946–47	—	250,000	250,000
1947–48	—	50,000	50,000
1948–49	—	3,000	3,000
1949–50	—	3,000	3,000
1950–51	—	3,000	3,000
1951–52	—	3,000	3,000
1952–53	—	3,000	3,000
1953–54	—	3,000	3,000
1954–55	—	3,000	3,000
1955–56	—	3,000	3,000
Total 1946–56	—	324,000	324,000

CHAPTER VIII

CO-OPERATION.

A.—GENERAL.

The co-operative movement, which was already firmly established in the Island in 1939, developed rapidly during the war period, gathering momentum from year to year. It is now the backbone of rural economy throughout the Island.

2. Co-operative societies, in name at least, are no novelty in Cyprus. The first co-operative society was registered in 1916; during the next twenty years many societies were registered, and superficially the movement appeared to have taken hold in the villages. In fact, many of the registered societies were co-operative in name only, their activities being mainly confined to the issue of long-term loans contracted from the Agricultural Bank; whence they came to be regarded by the people as little more than lending and collecting agents of the Bank. Very little short-term credit was given and for this facility the farmers were almost entirely in the hands of money lenders.

3. From 1935 onwards the Department of Co-operation undertook the reorganization of societies on sounder lines. In 1936 an arrangement was made whereby the long-term loans due by societies to the Agricultural Bank were transferred to the individual borrowers who would pay direct to the Bank. Societies were thus free to devote their energies to their proper purposes, namely, the encouragement of thrift, the provision of short-term credit and collective supply and marketing. This reorganization entailed cutting out much dead wood from the co-operative tree; thus the number of credit societies was reduced from 324 in 1934 to 262 in 1937.

4. Once having unlearnt the errors of the past, the movement made rapid progress. In 1937 the Co-operative Central Bank, which is a co-operative society with societies as members, was founded; in 1938 it started operations with funds provided by Barclays Bank (D.C. & O.) and with 71 societies as members. The functions of the bank are to provide short- and medium-term credit to its member societies, to accept deposits and to import and supply societies with such commodities as fertilisers, sulphur and seed potatoes.

5. Since 1937 the history of the co-operative movement has been one of continuous progress, steady at first and almost phenomenal during the last few years. This may best be exemplified by the following figures:—

	31st December.				
	1934	1938	1940	1943	1945
Number of societies	324	353	343	362	412
Number of members	16,035	24,079	31,286	45,000	56,881
Number of societies with deposits ..	45	123	262	330	369
Savings deposits	£5,231	£21,600	£52,458	£85,000	£288,114
Total deposits	£19,972	£80,105	£122,480	£380,000	£1,241,863
Reserve funds	£23,446	£41,186	£55,477	£100,000	£150,000
Co-operative Central Bank:					
Number of member societies ..	—	112	190	257	291
Deposits by member societies ..	—	£14,000	£22,000	£329,000	£874,789
Reserve Fund	—	£158	£2,385	£24,000	£36,145
Value of goods supplied to societies ..	—	£10,400	£40,000	£150,000	£262,079

6. During the past six years co-operative societies have not only performed their normal functions of providing credit, encouraging thrift and selling pooled products, but have also provided a ready-to-hand distributive organization which Government has not hesitated to use. The network of societies spread over the Island has been employed in distributing rationed commodities; fertilisers, sulphur and seed potatoes supplied by the Co-operative Central Bank have passed through their hands to producers; the societies have acted as agents and bankers for the purchasing of cereals, olive oil and other produce; they are actively assisting in the marketing scheme for perishables and they have sold thousands of Government Bonds and Savings Certificates to the rural population.

7. The Department is administered by the Registrar and Deputy Registrar with an inspectorate staff consisting of 2 Senior Inspectors, 8 Inspectors and 13 Supervisors. For the purpose of supervision and audit the Island is divided into six beats each in charge of an Inspector; the two remaining Inspectors are for the Turkish societies. The Senior Inspectors are attached to headquarters and deal with all special cases, *e.g.* new societies, backward societies, etc.

B.—FUTURE DEVELOPMENTS.

CREDIT AND WHOLESALE SOCIETIES, BANKS AND RETAIL STORES.

8. The policy of the department since undertaking the reorganization referred to above has been to establish credit societies and savings banks wherever there is a real demand and a reasonable prospect of success. It is intended to continue this policy during the decennium 1946–56, but at the same time to launch out into new co-operative ventures. Thus, as soon as possible, a Co-operative Wholesale Society will be established on lines similar to those of the Co-operative Central Bank, with societies as members. The objects will be to import and distribute to member societies all their requirements from abroad—seed, fertilizers, machinery, sulphur, leather, yarn, etc. It will thus relieve the Central Bank of the business of commodities supply and leave it freer to concentrate on its proper task of organizing credit facilities. Finance may be provided by the Central Bank. It is also intended to encourage the establishment of further consumers' co-operative retail stores in the towns and larger villages; 30 such stores already exist.

MARKETING.

9. For some years before the war, the members of certain village societies were in the habit of pooling produce, such as carobs, potatoes and cotton, with a view to securing more efficient and orderly marketing; the produce in such cases remained the property of the particular producer and was held and sold on his account by the society, which did not itself accept any liability. During the war, as mentioned in paragraph 6 above, the village societies have played a large part in the bulk purchasing by Government of agricultural produce, and there is no doubt that the effect has been to accustom both the societies and the individual farmers to the idea of collective marketing. So far, however, true co-operative marketing, as distinct from the pooling and marketing of produce through co-operative credit societies, has been limited to the creation of a few wine-making and fruit producers' societies. The Registrar is of the opinion that the movement is now sufficiently firmly established to admit the formation of proper marketing societies which will undertake the storage, processing and marketing of agricultural products, such as carobs, citrus, dairy and vine products. This branch of co-operative activity is notoriously difficult to manage and the department will be on its guard against forcing the pace unduly. The process must necessarily be slow, marketing societies only being formed when the support of the producers can confidently be counted upon.

10. In these circumstances it is not possible for the department to formulate in advance a specific programme for the development of co-operative marketing in the Island. The Registrar must be left a free hand as to timing and as to the methods to be adopted. The cost of this marketing development will in general be borne by the societies themselves, assisted by long-term credit from the banks, and save in one respect, which is mentioned below, no provision of funds for this purpose is required in the development programme.

STORES AND PROCESSING MACHINERY FOR AGRICULTURAL PRODUCE.

11. The marketing of cereals is a special question in regard to which Government's whole policy is at the present time under review. Various proposals, ranging from the re-organization of local marketing procedure to control of imported cereals and equalisation of returns to producers, have been formulated and are being examined. Whatever the outcome of this examination, it is clear that if the producers are to market their cereals in an orderly fashion and at their own convenience, the provision of stores for their use in the grain-producing villages is of the utmost importance Before the war, the producer was all too often compelled to sell his produce immediately after the harvest at prices which, owing to pressure on the market, were lower than the average obtaining throughout the season. To remedy this the Registrar proposes that co-operative societies should be encouraged during the decennium to construct their own stores. Apart from cereals, such stores should also be provided for producers of carobs, raisins, cotton and tobacco in the areas where those crops are grown. Of the societies at present existing at least 300 should be provided with their own stores. The average yearly surplus of cereals above producers' own requirements may be reckoned at about 1 million bushels. A conveniently sized unit for village stores would contain 4,000 bushels and would cost about £550. In large producing villages, several such units might be grouped together so as to form one large composite store. To store the average annual surplus of cereals 250 such

stores would be required at a total cost of £137,500. A further £12,500 would be required for the erection of stores for the other crops mentioned above. The total cost of erecting these stores would thus be some £150,000. If, as is hoped, it proves possible to build composite stores, containing two, four or more units, the cost of building per unit and the total cost of the whole programme would be somewhat reduced. Besides the provision of stores, producers in the important olive- and vine-growing areas should be enabled through co-operative marketing societies to instal modern, efficient plant for processing their products before marketing. The pace at which this development can proceed will depend on future price levels for the products in question, since a large part of the capital cost must necessarily be charged against the produce handled, and it is therefore not possible to forecast with any certainty the amount of plant which will be so required over the next ten years. But on a conservative reckoning, it is thought that at least eight new oil-pressing and wine-making societies should be in a position safely to instal plant, at a total cost of roughly £10,000, during the ten years.

12. There can be no question that in principle the co-operative movement should be self-supporting and that as a general rule it would be unsound to attempt to accelerate co-operative development by the injection of public funds. Nor, in the present prosperous state of the movement in Cyprus, could any general measure of Government assistance to co-operative societies be justified financially. This is not to deny, however, that in special cases there may be grounds for direct Government subvention and in fact it is considered that a few such cases do exist. There are certain poor, backward communities, such as the carob-growing villages of the Tilliria, among whom it is particularly desirable to accelerate the development of co-operative marketing and for whom the provision of a comparatively small measure of Government assistance towards the cost of building stores and purchasing plant may make all the difference between continuance of their present subjection to the merchant and money-lending classes and emergence into a new state of economic independence. It is proposed to provide a sum of £20,000 for assisting co-operative development in such cases ; the grant of assistance will be strictly limited to exceptionally poor communities and will be dependent on the villagers contributing their share of the cost ; in no case will the grant represent more than half of the total expenditure involved.

MISCELLANEOUS.

13. Further developments of co-operative activity which may possibly occur within the next few years are the establishment of land-leasing societies and of irrigation societies and the formation of co-operative transport societies. So far as can be foreseen, however, co-operative development in these directions will not entail expenditure of public funds.

CO-OPERATION.

APPENDIX.

*Expenditure on schemes included in the programme.

A.—BY YEARS.

Year	Grants for Stores and Machinery.				
	Capital	Recurring	Total	*Less* Receipts	Net Total
	£	£	£	£	£
1946–47	5,000	—	5,000	—	5,000
1947–48	3,000	—	3,000	—	3,000
1948–49	3,000	—	3,000	—	3,000
1949–50	3,000	—	3,000	—	3,000
1950–51	2,000	—	2,000	—	2,000
1951–52	2,000	—	2,000	—	2,000
1952–53	1,000	—	1,000	—	1,000
1953–54	1,000	—	1,000	—	1,000
1954–55	—	—	—	—	—
1955–56	—	—	—	—	—
Total 1946–56	20,000	—	20,000	—	20,000

B.—BY SCHEMES.

Scheme	Paragraph of Chapter	Capital	Recurring	Total	*Less* Receipts	Net Total
		£	£	£	£	£
Produce Stores	11–12	20,000	—	20,000	—	20,000

CHAPTER IX.

ROADS.

A.—INTRODUCTORY.

Leaving aside for the moment the streets within the built-up areas of towns and villages, there are three road-maintaining authorities in the Colony. These are the Public Works Department, the District Commissioners and the Forest Department. The needs of the Forest Department (which at present maintains some 279 miles of forest roads) in respect of road development have already been dealt with in Chapter IV.

2. The Public Works Department is responsible for all the main highways of the Colony, maintaining at the present time 730 miles of asphalted and 140 miles of gravel road. The general standard adopted for the former is a road 16 ft. wide between side drains, with a strip of asphalt 10 ft. wide and margins of hand-packed stone 1 ft. 9 inches wide on either side; the maximum gradient is 1 in 15. This now represents the minimum standard, and new and reconstructed roads afford a width of asphalt of as much as 16 ft. The P.W.D. gravel roads conform in width and gradient to the minimum standard for the asphalted roads; the surface usually consists of "havara" ("the term applied locally to the argillaceous gravels found among the tertiary limestones", Bellamy, Geology of Cyprus). In the plains, all but a few roads (those which have been recently constructed) follow the route of ancient tracks from which they developed by a gradual process of conversion. It is for this reason that the roads wind across the plains in a curiously contorted fashion, with many sharp bends and sudden diversions to circumvent obstacles which would hardly be recognised as such in modern road engineering. The greater part of the existing system of asphalted roads was created during the four years 1930 to 1934; the total cost was approximately £300,000 and of this £45,000 was provided by means of a grant from the Colonial Development Fund (Scheme No. 73). Since then the only major new asphalting undertaken has been on the direct route from Nicosia to Famagusta and the hill road from Lefka to Prodhromos.

3. For the purposes of road construction and maintenance, the Public Works Department is organized on a divisional basis, each division comprising two administrative districts (Nicosia–Kyrenia, Famagusta–Larnaca, and Limassol–Paphos). The division is in charge of a Divisional Engineer who has his own headquarters and road staff. Fairly close liaison is maintained between the District Commissioners and the Divisional Engineers.

4. The District Commissioners are responsible for the minor roads of the Colony. They appear to have inherited this responsibility from the early days of the British administration when communications between districts were so bad as to render it impossible for any central authority to take charge of road construction and maintenance. Under those conditions, decentralisation to the District Commissioners, who had also inherited the functions of the Turkish qaimaquams in respect of the direction of the corvée, was obviously sound and probably resulted in more rapid opening-up of the country than would have been the case if road-making had been left entirely to a central authority in less close touch with the village communities. It is for consideration whether, with the improvement of communications, the increasing technicality of road work, and the pre-occupation of the Commissioners with a vastly increased burden of purely administrative work, the retention of Commissioners as road authorities is now justified. Proposals are outlined in paragraphs 31 and 32 below for the transfer from Commissioners to the Public Works Department of 400 miles of the more important village roads. This suggestion has the full support of the District Commissioners and may be regarded as a first step towards relieving the District Administration of all executive responsibility for roads. If such a change takes place, the duties of the District Commissioners in respect of roads will be similar to those which they now discharge in respect of other branches of the public service, such as the Irrigation and Agricultural Departments: that is to say, they will be responsible for advising the Director of Public Works regarding the requirements of the villages in their districts, for assisting him in his dealings with the village communities, for ensuring that the people benefiting render any assistance which may be required of them and so on.

5. The distribution of the milage of Commissioners' roads as between districts is as follows:—

Nicosia	533 miles
Kyrenia	154 ,,
Famagusta	400 ,,
Larnaca	184 ,,
Limassol	269 ,,
Paphos	251 ,,
Total	1,791 miles

The standard of these roads varies greatly. The only criterion generally applied is that the road should be passable in all weather and even this is not always achieved. The best village roads run to a width of 14 ft. with a central strip 9 ft. wide consisting either of a foundation of hand-packed stones with "havara" surface or of a crust of gravel and small stones which has been consolidated by years of traffic.

6. Each District possesses its own Village Road Staff, consisting of a Chief Road Foreman, a Roads Clerk and a number of foremen. This staff works under the direct supervision of the Commissioner who calls on the Public Works Department for assistance only in exceptional cases.

7. There are several authorities responsible for the streets within the built-up areas of towns and villages. In the towns, the Director of Public Works is responsible for maintaining any trunk roads which may pass through the municipal limits, but the larger municipalities make an annual contribution towards the cost of upkeep. The other streets within the municipal limits are the responsibility of the elected Municipal Councils. Outside the towns, the Public Works Department maintains its own roads without any contribution from the villages through which they pass. All other streets within the villages have in the past been regarded as primarily the responsibility of each village community, although not infrequently the District Commissioners (who have wide discretion in the spending of their road votes) have adopted various systems for "priming the pump" with contributions from funds under their control. The local authority which is thus primarily responsible may be either the Village Public Health Commission (when the Public Health (Villages) Law has been applied to the village) or the ordinary Village Authority (consisting of the village headman and elders) or the Summer Resort Development Board (where a village has been scheduled under the Summer Resort Development Law). These three types of village local authority possess widely different powers of raising revenue. Generally speaking, the Summer Resort Boards enjoy sufficient revenue to be able to provide annually a sum adequate for keeping the streets clean and for maintaining them in a fair state of repair. The Village Public Health Commissions are rarely willing or able to impose taxation sufficient for the proper maintenance of their streets which thus, unless assistance is given by the Commissioner, deteriorate from year to year. Finally, the ordinary Village Authority has no power to raise revenue for road maintenance, except if the village agrees to contract a loan under the Village Obligations Law, and this the villagers are rarely prepared to do; the only means of raising revenue then remaining is by voluntary collections. Sometimes, if the Commissioner promises substantial assistance as an inducement, the villagers will agree to contribute, but in most cases they reject absolutely any responsibility for the maintenance of their streets, regarding this as a service which should be provided by the central Government and financed from the proceeds of the Immovable Property Tax.

8. The needs of the municipalities and summer resorts in respect of roads will be considered in the Chapters dealing with municipal and holiday resort development. Apart, therefore, from the Government departments concerned, the only road-maintaining authorities to be taken into account in the present connection are the Village Authorities and Village Public Health Commissions.

9. Having regard to the size of the Island, to the difficult nature of much of the country and to the volume of traffic carried, Cyprus possesses in the network which the Public Works Department and Commissioners' roads compose an admirable system of internal communications. The total length of motorable roads in the Colony, including the forest roads, is 2,910 miles. All the district towns are linked by asphalted roads, four such roads run up to and join on Troodos, giving access to the summer resorts, and one can travel by asphalted road round almost the whole coast. Of the 647 villages in the Island all but 22 are either on the asphalt or possess at least one motorable gravel road linking them to an asphalted main road. The villages which form the exception are mostly small, backward hamlets, consisting of a few scattered hovels, which are often inhabited during a part of the year only. All the principal antiquities and places of interest in the Island, including the medieval castles on the precipitous northern range, are provided with approach roads. The main forests are pierced by a system of inspection roads so that one can travel comfortably through the most densely wooded areas.

10. Such being the network of roads already existing in the Colony, it is considered that the efforts of the Cyprus Government over the next ten years should be directed rather towards getting that road system into proper order than to launching out on any ambitious programme of new road construction. It will be seen from the following paragraphs that this limited objective will provide ample work for the staff likely to be available and will make sufficiently large demands on the funds provided for development purposes.

11. There is no doubt that at the present time many of the component roads within the network are in a decidedly bad state of repair, largely as a result of the hard usage and neglect from which they have suffered during the war. Moreover, even before the war, the standard of road and street maintenance

achieved was not, as may be inferred from the preceding paragraphs in this Chapter, in every respect satisfactory. Although the system as a whole was good, it exhibited certain major shortcomings which should be remedied as part of the process of getting the existing system into proper order. For example, the village streets were "nobody's business" and suffered accordingly; the funds allotted to Commissioners barely sufficed to enable them to keep open the roads for which they were responsible and left no margin for major repairs; and none of the main highways across the plains was free from blind corners and other danger spots.

12. Accepting the general conclusion that the network as a whole is adequate for present needs but that many of the component roads and streets fall short of a reasonable standard, having regard to the traffic which they are required to carry, it is suggested that the road programme for the next ten years should comprise the following in descending order of urgency :—

(1) reconditioning of all roads to their pre-war condition;
(2) improvement of streets within the built-up areas of the villages;
(3) improvement of certain main village (gravel) roads, after responsibility for their upkeep has been transferred from the District Commissioners to the Public Works Department; and
(4) eradication of positively dangerous features from the main asphalted highways in the plains.

The cost of achieving these four aims is set out in the sections of this Chapter which follow. Before passing, however, to detailed examination of these proposals, there are three points of a general nature which call for explanation.

13. In the first place, it may be said that the programme outlined above is not strictly developmental in as much as it envisages merely reconditioning and improvement of *existing* roads. On this, the following observations are offered :—

(*a*) In the case of roads it is more than ordinarily difficult to distinguish between the processes of reconstruction and of development. The reconstruction of a whole system is a major undertaking which partakes of the character of a new development. Nor is the distinction one which can appropriately be made in the case of a territory such as Cyprus where, as explained above, little or no opening up of new country is required.

(*b*) The cost of achieving each of the four aims suggested above will be such as to require the provision of extraordinary funds considerably in excess of the amounts at present provided annually for routine maintenance.

(*c*) The nature of road work is such that it is possible to spend almost unlimited sums on developments which can be shewn to be at least highly desirable and it is hence scarcely possible to avoid, when dealing with roads, fixing an arbitrary limit on the amount of development to be undertaken, regard being had to the financial liability involved and the claims of other services. As a rule, reconstruction of existing road services must be preferred to new road development schemes and the fixing of such an arbitrary limit may thus, and, it is considered, in the case of Cyprus does in fact, operate to exclude the latter.

(*d*) Road schemes are conditioned perhaps rather more than most development projects by the factor of the residual commitment involved for maintenance. An attempt is made in paragraphs 38 and 39 below to forecast the provision which will be required annually in order to maintain the existing road system in its improved state after the four objects outlined above have been achieved. If this forecast is approximately correct, it is impossible to resist the conclusion that new road development on any considerable scale could be undertaken only at the risk of burdening the Colony's budget with a disproportionate commitment for roads and, consequently, of starving other no less important services.

14. In the second place, it should be explained that, while no doubt is felt as to the soundness of the general proposition that the Government's efforts and expenditure should be concentrated during the next ten years on the four objects listed in paragraph 12 above, it is not desired absolutely to exclude either new asphalting or the opening of new roads in special cases. As for the former, it seems probable that the very extensive programme of asphalting undertaken in the years 1930 to 1934 went rather beyond what was economically justifiable, having regard simply to the volume of traffic then carried and that, even taking into account the increase in motor traffic since that time, further extension of the milage of asphalted roads is as yet scarcely warranted. Nevertheless, cases may arise during the next ten years, *e.g.* as a result of industrial development in some locality off the main roads, where asphalting would be justifiable. As for opening new roads, it is recognised that two or three of the villages not yet provided with motorable roads are of sufficient size to merit extension of the road system and that in certain other cases,

e.g. where a new trace would provide a shorter route and reduce considerably maintenance costs, it might be of advantage to construct a new road. But these are essentially special cases which will have to be considered as they arise ; they do not affect the general programme with which this Report is concerned.

15. Finally, it should be recorded that the conclusions and recommendations in this Chapter may require modification in the light of—

(*a*) any decision which may be reached on the question of abandoning the Government Railway which runs from Famagusta to Nicosia and thence to the Lefka mining area. Abandonment might involve considerable reconstruction of the roads on to which the railway traffic would be diverted ;

(*b*) the advice offered by an official committee which has recently been appointed under the chairmanship of the Controller of Transport and Marketing to consider the control and co-ordination of transport throughout the island.

B.—RECONDITIONING.

(i) GENERAL.

16. During the war rapid and widespread deterioration of the Colony's roads has occurred. The causes are not far to seek. The presence of large numbers of troops in the island has thrown on to the roads a great deal of heavy traffic of a kind which they were not designed to carry. Owing to the tactical disposition of these troops, the roads bearing the greatest part of this burden have often been minor village roads least suited to support heavy traffic. The drivers of the military vehicles have not always possessed sufficient skill to negotiate successfully the natural difficulties of Cyprus roads, and damage to bridges, culverts and retaining walls has been considerable. Against this cause of deterioration must be reckoned the contributions made from time to time by the military authorities towards the maintenance of those roads which were of tactical importance. It is hardly possible to balance closely these contributions against the damage attributable to military traffic, but the departments concerned are agreed that the latter certainly outweighs the former. It may be mentioned in this connection that for three years during the war a large section of the main road network was deliberately allowed to fall into disrepair at the request of the military. To some extent the effect of the heavy army traffic was offset by a reduction in civilian traffic as a result of strict transport control. On the balance, however, there is no doubt that the Colony's roads have carried a greater volume, and a more damaging kind, of traffic than before the war.

17. The second serious cause of deterioration is the sudden rise in the cost of road work during the war which has occurred without compensatory increase in the provision for road services. As a conservative estimate, it may be taken that the present cost of road work is some three times the pre-war figures. Allowing for the marked decrease in the output of the Cypriot labourer which has resulted from the easy conditions of employment during the war, the rise in cost may in fact be a good deal more at the present time. One labourer now costs £73 per annum as against £26 to £30 before the war. A mile of asphalt road costs about £120 to maintain as against £44 before the war ; a mile of gravel road costs about £80 as against £20 to £30.

18. The effect of this sudden rise in cost has not been offset by anything like a comparable increase in the annual expenditure for road maintenance. The average annual expenditure for road maintenance in the pre-war years 1936 to 1939 inclusive was :—

	£
Public Works Department	35,400
Commissioners	20,400
Total	55,800

The average annual provision during the war years 1940 to 1945 has been—

	£
Public Works Department	56,400
Commissioners	25,100
Total	£81,500

This comparison does not take into account expenditure on roads from army funds or from funds provided in the Colony's estimates for unemployment relief. The former, as has been said, does not offset the extraordinary deterioration caused by army traffic. The latter made available for road maintenance work about another £100,000 over the five years 1940 to 1944, raising the average annual provision for roads to £101,500 as against £55,800 before the war. If it is accepted that over the past five years road costs may be taken as three times the pre-war figures, the annual provision required in order to maintain the roads in their

pre-war condition was £167,400; from which it would appear that the Colony's roads have been starved to the extent of about £66,000 annually during the war. These figures exaggerate the cost of reconditioning since deterioration has not, in fact, been cumulative year by year; but they demonstrate that merely to make up the arrears of maintenance is bound to be a very costly undertaking.

19. Finally, the lack of imported materials, such as bitumen, during the war has contributed to the deterioration of the Island's roads. The shortage of surfacing material has been accentuated by the fact that the Public Works Department, being mechanically equipped for the use of cold emulsion, lacks suitable plant for heating and spraying solid bitumen, the only form of surface dressing obtainable during the years 1942 to 1944.

(ii) P.W.D. ROADS.

20. Since 1944 much has been done to restore the P.W.D. roads to their 1939 condition, although lack of bitumen and heating plant has proved a handicap; the position in these respects is, however, improving. The work of reconditioning has been regarded and financed as maintenance work, the approved estimate under maintenance heads having been increased for the purpose. Thus in 1944 and 1945 the provision for maintenance has been £83,000 and £107,000 as against the pre-war average of £35,400 annually. The Director estimates that, if maintenance expenditure is continued at the 1945 figure for another two years, the P.W.D. roads will by the end of that time have been restored to their pre-war condition. A considerable part of this expenditure must be regarded as for ordinary maintenance which is necessary in order to prevent further deterioration. The exact proportion between maintenance and reconditioning is difficult to determine but the cost of the latter may be reckoned to be in all about £28,000. Clearly, reconditioning should be undertaken as early as possible and it is proposed that the 1945 provision (£107,000) should be repeated in 1946–47 and again in 1947–48 for the dual purpose of maintenance and reconditioning. Thereafter, reconditioning being complete, the sum required annually for maintaining existing P.W.D. roads will, on the basis of present costs, be about £93,000.

(iii) COMMISSIONERS' ROADS.

21. From the total milage of Commissioners' roads shewn in paragraph 5 above should be excluded 400 miles of village roads which it is proposed (see paragraphs 32 and 33 below) to transfer to the Public Works Department. The cost of combining maintenance and reconditioning of the remaining 1391 miles of road over a period of two years, as in the case of the P.W.D. roads, is estimated to be £168,000 of which one half should be regarded as representing the cost of reconditioning. This may seem high as compared with the estimate for the P.W.D. roads, but it should be borne in mind that the Commissioners' road maintenance votes have not been increased during the last two years to anything like the same extent as those of the Public Works Department. Before the war, the average annual maintenance expenditure for all districts was £19,000; in 1944 and 1945 the provision was £23,000 and £41,000 respectively. Furthermore, there seems to be good reason to believe that for some years before the war, Commissioners were getting less than they required in order to maintain the existing condition of their roads, which were in consequence already deteriorating steadily from year to year.

22. In view of the fact that Commissioners' road staff will be relieved of a very considerable burden of responsibility by the transfer of the main village roads to the Public Works Department, it is not considered that any increase in supervisory staff will be required in the District Offices. Additional foremen and assistant foremen may be required from time to time but these will be paid from the work as temporary employees. In any case, since the proposed local government institutions may take the place of the Commissioners as road-maintaining authorities, increase of the permanent Village Road Staff would be ill-advised.

C.—VILLAGE STREETS.

23. Under the provisions of the Village Roads Law of 1900 each able-bodied villager was obliged to give six days' labour annually (commutable for a money payment) to whatever road or other work of public utility might be decided upon by the village council, subject to general direction from the Commissioner. The law worked well and the villagers are reported to have shewn energy and enthusiasm in carrying out the works selected. A considerable part of the labour thus available was very naturally expended on the streets within the villages which were consequently maintained in a fair state of repair. This law was repealed in 1934 with the object of relieving landless villagers from the obligation to give free labour or to pay for the upkeep of the village roads. Since then, as explained in paragraph 7 above, the village communities have been held responsible for the repair of their streets, some occasional assistance being granted from the Commissioners' road funds. The result has been that for more than ten years scarcely any repairs have been effected in most of the villages, the foundations and cobbled surface laid down under the corvée system have been disintegrating from year to year and in many villages the streets are now merely earth

tracks inches deep in dust in summer, in mud in winter. The attempt to substitute the machinery of the Public Health (Villages) Law, which empowers the Village Health Commission to levy an annual rate of up to £1 on each occupier, for that of the old Village Roads Law has not proved a success owing to the reluctance of the villagers to impose adequate assessments and the high initial cost of remedying the neglect of the past ten years.

24. The Commissioners are agreed that of the stock requests made to them while on tour in the villages none is more insistent or better justified than the demand for improvement of the village streets. This, the provision of a good piped water supply and the improvement of sanitation are the basic needs of the village communities in Cyprus ; squalor, discomfort and disease are inevitable so long as the village streets remain in their present condition.

25. The formulation of proposals for this purpose presents certain difficulties. It is not possible to prescribe either a standard or a method of improvement which will be applicable to all villages ; clearly what is appropriate for a small hill village in the Paphos wine country will not do for a large market centre in the Mesaoria plain. Again, the standard of improvement to be aimed at is largely governed by the amount of the residual commitment for upkeep which will be entailed ; this commitment must be related to the resources of the authority which will be responsible for maintaining the streets when improved, for unless adequate maintenance is assured, the capital expenditure on improvement may be largely wasted.

26. In view of these difficulties it has been necessary to rely very largely on the personal judgment of the District Commissioners, who are alone in a position to decide what degree of improvement is necessary and reasonable having regard to the question of upkeep. Certain broad principles, intended to ensure as great a uniformity of estimation as possible, have been outlined for the Commissioners to work on. Of these the most important is that expenditure for this purpose should be conditional upon the payment of suitable contributions by the benefiting communities; due regard being had to their relative prosperity. These contributions will vary from one half in the case of the rural municipalities (which are to be treated as villages for the purpose of this proposal) to one-sixth in the case of the poorest and most backward villages.

27. The schemes from the several districts have been collated and a comprehensive scheme prepared under which it is proposed that a sum of £220,000 should be made available for the improvement of village streets over the ten years ; of this it is estimated that £70,000 should be provided by way of village contributions. It should be recognized that, in view of the difficulties referred to above, accurate estimation in this respect is an impossibility. This is clearly one of the schemes which must be regarded as subject to revision from time to time during the decennium as circumstances change, and any figure suggested for this purpose in the development programme must be in the nature of a token provision. What can be said is that on the basis of present costs the sum of £220,000 is hardly likely to prove an over-estimate. The following is a provisional suggestion for the manner in which the £220,000 should be divided as between districts :—

District	*No. of villages*	*Rural Population in thousands*	*Government contribution* £	*Village contribution* £	*Total* £
Nicosia	190	108	45,000	23,000	68,000
Kyrenia	48	25	11,000	5,000	16,000
Famagusta	100	81	28,000	13,000	41,000
Larnaca	60	38	16,000	7,000	23,000
Limassol	113	53	24,000	11,000	35,000
Paphos	136	50	26,000	11,000	37,000
Total	647	355	£150,000	£70,000	£220,000

28. With regard to the figure suggested above for the sum of the village contributions, it should be understood that although here, as elsewhere in this Report, a suggestion is made to indicate the order of financial self-help which may reasonably be expected from the village communities, in fact the size and nature of these village contributions will have to be considered, before any of the particular schemes in question is undertaken, against the general background of the economic conditions obtaining and the administrative system in force in the rural areas during the coming ten years. As all other estimates in this Report, the suggestions for village contributions are based on present conditions ; a serious decline in rural prosperity or a transfer to local government authorities of responsibilities and sources of revenue now appertaining to the central government would probably entail reconsideration of the distribution of cost.

29. It is proposed that maintenance after improvement should be regarded as the responsibility of the villages themselves and that, until the introduction of adequate machinery for raising revenue is provided, improvement of village streets should be undertaken only in the rural municipalities, which can already provide adequate funds for maintenance although not for capital improvement, and in any of the larger villages where the Public Health Law has been applied and is working well enough to provide sufficient funds for maintenance. For the first four years the annual inclusive provision suggested is £11,000; for the fifth and sixth year it will be £22,000 and thereafter £33,000. However urgent it may be to improve the village streets, it would not be practicable to tackle this work at once and in a short space of years; in particular it should be remembered that during the first five years the villages will be called upon to contribute large sums towards irrigation and domestic water supply schemes, rural health units and village schools, and that it is desirable to spread the incidence of their financial contributions fairly evenly over the whole development period.

30. Elsewhere in this Report proposals are made for the appointment of a Town Planning Adviser together with the staff required to assist him. It is to be hoped that planning will not be confined to the main towns but will be applied at least to all the larger village areas. Mention of this is made here because the question of coordinating the work of the town-planning organization and of the authorities undertaking the street improvement scheme should on no account be overlooked.

D.—MAIN VILLAGE ROADS.

31. Reference has already been made in paragraph 4 above to the proposal for the transfer of 400 miles of village roads from the Commissioners to the Public Works Department. The roads selected are all main arteries of village traffic. With the rapid spread of motor transport into the rural areas which has occurred during the past fifteen years, these roads are now no longer suitable for the traffic which they have to carry. They need thorough reconstruction in respect of drainage, alignment, bridges and culverts. As has been said, the Commissioners' funds have scarcely sufficed in the past to do more than keep open the roads for which they are responsible and no major improvement of the particular roads carrying the greatest burden of increased traffic has been possible. The reconstruction of the selected 400 miles of village roads will be a major undertaking which should be entrusted to the department equipped with the machinery and technical staff for the job; thus, even apart from the general argument (outlined in paragraph 4 above) for relieving Commissioners of their road-maintaining responsibilities, it is the Public Works Department which should be charged with the effectuation of this scheme.

32. The roads selected are distributed between the districts as follows:—

Nicosia	90	miles
Kyrenia	52	,,
Famagusta	50	,,
Larnaca	72	,,
Limassol	66	,,
Paphos	70	,,
Total	400	,,

It is intended to bring them up to roughly the standard of the existing P.W.D. gravel roads at a total cost of £120,000 or £300 per mile including maintenance during improvement. The cost of maintaining these roads in their improved state will be £32,000 per annum or £80 per mile.

E.—DANGEROUS FEATURES ON MAIN ROADS.

33. In preparing proposals for the eradication of dangerous features from main highways, the mountain roads have not been considered on the ground that to make these really "safe" would demand very large expenditure such as the Colony cannot expect to afford. In considering the remainder, a strict criterion of danger has been applied such that only features which constitute an unexpected or unreasonable hazard on otherwise straight or easy routes have been included. It is considered that these constitute greater danger than the negotiation of the mountain roads, which must be accepted as they stand and which carry comparatively little traffic save during the short hill season in the summer.

34. It is proposed that a sum of £30,000 should be expended for this purpose. It should be recognized that this will by no means remove all the dangerous features on the main highways in the plain; three or four times this sum could justifiably be devoted to this object. But it will suffice to deal with certain real danger spots, which have already caused fatal accidents. By implication these improvements are to be regarded as of great urgency and it is proposed that the work should be completed in the three years 1946–47 to 1948–49. No additional recurrent commitment is involved.

F.—MISCELLANEOUS.

(i) CART CONVERSION.

35. In submitting their development proposals, road-maintaining authorities have drawn attention to the destruction of road surface caused by the local narrow-wheeled, metal-tyred carts and have stressed the desirability of converting to rubber tyres. At the present time, even if pneumatic tyres were available, which they are not, the cost of conversion would be prohibitive. But it is recommended that Government should give urgent consideration to encouraging cart owners to change over to rubber tyres as soon as these become available in adequate supply. Such, indeed, is the destruction caused by the metal-tyred carts and such the saving in cost of road maintenance which may be expected to result from conversion that it is for consideration whether it would not be to Government's advantage, in conjunction with some legislative sanction prohibiting or restricting the use of metal-tyred carts, to offer financial assistance to owners who might be willing to effect the change; but this must wait until the supply of rubber tyres is easier and the cost of conversion is brought within reasonable bounds.

(ii) REVIEW OF EXISTING ROAD SYSTEM.

36. It is recommended that, before embarking on any general programme of reconditioning and improvement, Government should undertake a comprehensive review of the Island's road system in order to exclude any roads which may be redundant or of so little use as not to justify maintenance. It is further recommended that in future no new road (including extension of existing roads and widening of existing tracks) should be opened without the authority of the Colonial Secretary.

(iii) MAINTENANCE.

37. The road programme set out above must clearly be considered in relation to the commitment which is involved for maintenance and this Chapter would not be complete without some attempt to assess that commitment. On the basis of a reasonable flat rate per mile per year for the schemes outlined above, the annual commitment for which provision will be required in the Colony's Estimates will be about £165,000 which is made up as follows:—

Scheme	*Milage*	*Rate per mile per year* £	*Total annual charge* £
1. Existing Roads after Reconditioning:—			
(i) P.W.D.—			
(*a*) asphalt	730	110	80,300
(*b*) gravel	140	80	11,200
(ii) Commissioners'	1,391	30	41,730
2. Village Streets	unknown	nil	nil
3. Main Village Roads (to be added to those under 1 (i) (*b*) above)	400	80	32,000
4. Dangerous Features on Main Highways	15	nil	nil
Total per annum			£165,230

38. The actual annual expenditure on road maintenance by the Public Works Department and the Commissioners in the four years 1936–1939 averaged £55,800 (see paragraph 18 above), which represents almost exactly one third of the future annual commitment suggested above. The only new maintenance commitment envisaged is in respect of the higher standard at which the 400 miles of main village roads are to be maintained. The remainder of the increase is due to increased costs, mainly in respect of labour.

(iv) SUMMARY.

39. If the proposals outlined above are adopted, the Government's total commitment for roads, including maintenance, over the ten years will be £1,986,000 which is made up as follows:—

Scheme	*Capital, including maintenance during period of capital expenditure* £	*Maintenance after completion of the scheme* £
1. Reconditioning—		
(i) P.W.D.	214,000	744,000 (8 yrs.)
(ii) Commissioners'	168,000	336,000 (8 yrs.)
2. Village Streets	150,000	nil
3. Main Village Roads	120,000	224,000 (7 yrs.)
4. Dangerous Features	30,000	nil.
Total	£682,000	£1,304,000
Total Capital and Maintenance		£1,986,000

40. In the ten years 1930 to 1939 the total expenditure on roads (capital and maintenance) was £563,026; over the same period the total expenditure on all services was £8,076,878; so that road expenditure represented 7% of the whole. If it proves possible for the Colony to maintain an average total revenue during the coming ten years of about £2½ millions per annum, the devotion of roughly £2 millions to roads (8% of the total revenue for the ten years) during the same period would appear to be not inappropriate having regard to the figures already quoted for the ten years immediately before the war.

41. It should be clearly understood that the greater part of the £1,986,000 proposed will be required in any case in order to keep the Colony's road system going, whether or not any new developments or major improvements are undertaken. The cost of the latter in fact amounts to £404,000 in all as follows:—

	£
1. Village Streets	150,000
2. Difference between (*a*) improving 400 miles of village roads and maintaining them in that improved state and (*b*) maintaining them as Commissioners' roads	224,000
3. Dangerous Features	30,000
Total	£404,000

The remaining £1,582,000 represents reconditioning and maintenance expenditure which is unavoidable if the road system is to be maintained in the state in which it was before the war.

42. It is proposed to accept as a charge against development funds the capital cost of reconditioning the P.W.D. and Commissioners' roads, of improving village streets and the 400 miles of main village roads and of remedying the dangerous features on main highways. The reconditioning items are a doubtful development charge but are admitted as being a major undertaking outside the normal commitment to road maintenance. The total charge for roads against development funds will thus be £412,000 as shown in the Appendix which follows.

ROADS.

APPENDIX

Expenditure in connection with the schemes included in the programme (including a statement of maintenance expenditure not chargeable to development).

A.—BY YEARS.

Year	Scheme :—Reconditioning and Maintenance (P.W.D. Roads)				
	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
	£	£	£	£	£
1946–47 ..	14,000	93,000	107,000	—	107,000
1947–48 ..	14,000	93,000	107,000	—	107,000
1948–49 ..	—	93,000	93,000	—	93,000
1949–50 ..	—	93,000	93,000	—	93,000
1950–51 ..	—	93,000	93,000	—	93,000
1951–52 ..	—	93,000	93,000	—	93,000
1952–53 ..	—	93,000	93,000	—	93,000
1953–54 ..	—	93,000	93,000	—	93,000
1954–55 ..	—	93,000	93,000	—	93,000
1955–56 ..	—	93,000	93,000	—	93,000
Total 1946–56 ..	28,000	930,000	958,000	—	958,000

Year	Scheme :—Reconditioning and Maintenance (Commissioners' Roads)				
	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
	£	£	£	£	£
1946–47 ..	42,000	42,000	84,000	—	84,000
1947–48 ..	42,000	42,000	84,000	—	84,000
1948–49 ..	—	42,000	42,000	—	42,000
1949–50 ..	—	42,000	42,000	—	42,000
1950–51 ..	—	42,000	42,000	—	42,000
1951–52 ..	—	42,000	42,000	—	42,000
1952–53 ..	—	42,000	42,000	—	42,000
1953–54 ..	—	42,000	42,000	—	42,000
1954–55 ..	—	42,000	42,000	—	42,000
1955–56 ..	—	42,000	42,000	—	42,000
Total 1946–56 ..	84,000	420,000	504,000	—	504,000

A.—BY YEARS—*continued.*

Year		Scheme :—Village Streets				
		Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
		£	£	£	£	£
1946–47	..	11,000	—	11,000	3,500	7,500
1947–48	..	11,000	—	11,000	3,500	7,500
1948–49	..	11,000	—	11,000	3,500	7,500
1949–50	..	11,000	—	11,000	3,500	7,500
1950–51	..	22,000	—	22,000	7,000	15,000
1951–52	..	22,000	—	22,000	7,000	15,000
1952–53	..	33,000	—	33,000	10,500	22,500
1953–54	..	33,000	—	33,000	10,500	22,500
1954–55	..	33,000	—	33,000	10,500	22,500
1955–56	..	33,000	—	33,000	10,500	22,500
Total 1946–56	..	220,000	—	220,000	70,000	150,000

Year		Scheme :—Main Village Roads				
		Capital *	Recurring	Total	*Less* Savings or Receipts	Net Total
		£	£	£	£	£
1946–47	..	40,000	—	40,000	—	40,000
1947–48	..	40,000	—	40,000	—	40,000
1948–49	..	40,000	—	40,000	—	40,000
1949–50	..	—	32,000	32,000	—	32,000
1950–51	..	—	32,000	32,000	—	32,000
1951–52	..	—	32,000	32,000	—	32,000
1952–53	..	—	32,000	32,000	—	32,000
1953–54	..	—	32,000	32,000	—	32,000
1954–55	..	—	32,000	32,000	—	32,000
1955–56	..	—	32,000	32,000	—	32,000
Total 1946–56	..	120,000	224,000	344,000	—	344,000

* including maintenance during improvement.

A.—BY YEARS—*continued*.

Year	Scheme :—Dangerous Features on Main Highways				
	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
	£	£	£	£	£
1946–47 ..	5,000	—	5,000	—	5,000
1947–48 ..	10,000	—	10,000	—	10,000
1948–49 ..	15,000	—	15,000	—	15,000
1949–50 ..	—	—	—	—	—
1950–51 ..	—	—	—	—	—
1951–52 ..	—	—	—	—	—
1952–53 ..	—	—	—	—	—
1953–54 ..	—	—	—	—	—
1954–55 ..	—	—	—	—	—
1955–56 ..	—	—	—	—	—
Total 1946–56 ..	30,000	—	30,000	—	30,000

B.—BY SCHEMES.

No.	Scheme	Paragraphs in Chapter	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
1	Reconditioning :—		£	£	£	£	£
	(*a*) P.W.D.	20	28,000	930,000	958,000	—	958,000
	(*b*) Commissioners'	21–22	84,000	420,000	504,000	—	504,000
2	Improvement of Village Streets ..	23–30	220,000	—	220,000	70,000	150,000
3	Improvement of Main Village Roads	31–32	120,000	224,000	344,000	—	344,000
4	Eradication of Dangerous Features on Main Highways ..	33–34	30,000	—	30,000	—	30,000
	Total	..	482,000	1,574,000	2,056,000	70,000	1,986,000

C.—SUMMARY OF DEVELOPMENT CHARGES.

(excluding maintenance expenditure not chargeable to development)

(i)—BY YEARS.

Year	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
	£	£	£	£	£
1946–47 ..	112,000	—	112,000	3,500	108,500
1947–48 ..	117,000	—	117,000	3,500	113,500
1948–49 ..	66,000	—	66,000	3,500	62,500
1949–50 ..	11,000	—	11,000	3,500	7,500
1950–51 ..	22,000	—	22,000	7,000	15,000
1951–52 ..	22,000	—	22,000	7,000	15,000
1952–53 ..	33,000	—	33,000	10,500	22,500
1953–54 ..	33,000	—	33,000	10,500	22,500
1954–55 ..	33,000	—	33,000	10,500	22,500
1955–56 ..	33,000	—	33,000	10,500	22,500
Total 1946–56 ..	482,000	—	482,000	70,000	412,000

(ii)—BY SCHEMES.

No.	Scheme	Paragraphs in Chapter	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
1	Reconditioning :—		£	£	£	£	£
	(*a*) P.W.D.	20	28,000	—	28,000	—	28,000
	(*b*) Commissioners'	21–22	84,000	—	84,000	—	84,000
2	Improvement of Village Streets	23–30	220,000	—	220,000	70,000	150,000
3	Improvement of Main Village Roads	31–32	120,000	—	120,000	—	120,000
4	Eradication of Dangerous Features on Main Highways ..	33–34	30,000	—	30,000	—	30,000
	Total		482,000	—	482,000	70,000	412,000

CHAPTER X.

VILLAGE DEVELOPMENT.

A.—INTRODUCTORY.

Of the 435,000 inhabitants of Cyprus some 355,000 live in the rural areas. All but a very few of these have their dwellings within the villages ; the isolated farmstead is rare in Cyprus and those which exist have usually been established within the last 50 years. The natural sociability of the Cypriot, the need for protection against robbers, the scarcity of suitable supplies of water for domestic use and, until recent years, the lack of roads passable by wheeled traffic are doubtless among the chief reasons for this preference for living in the closest proximity with one's neighbours in a compact huddle of contiguous buildings such as constitute the typical Cypriot village.

2. Apart from this general characteristic of compactness, the villages of Cyprus exhibit considerable variety in the design of their component buildings, in the materials used, and in their general lay-out and appearance. The conditioning factors are climate, site, availability of materials and the degree of prosperity of the inhabitants. The term " village " may thus in Cyprus signify anything from a group of primitive hovels built into the hillside in the Tilliria area of Paphos forest, with walls of loose stone and a roof of brushwood and earth, to the solid comfort of the market township in the Mesaoria with its two-storeyed houses of stone and plastered mud-brick. Moreover, even within groups of villages which are comparable as to their physical character it is scarcely possible to generalise regarding the living conditions of the inhabitants. For these vary remarkably not so much between individual households as between different village communities. On closer inspection of two neighbouring villages whose general appearance is hardly distinguishable, the houses, streets and public buildings in one may be found to be kept clean and tidy, while in the other dirt and disorder prevail. The sense of community and of a communal tradition and way of living is still very strong in the villages.

3. One generalisation may, however, be permitted ; that is the distinction between the villages of the plain and those of the hills. It may be of assistance in exemplifying the need for the improvements outlined below in this chapter if a brief description is now provided of such features as are common to most of the villages in each class.

4. In the villages of the plain, the houses usually cluster along two or three main streets on to which opens the main door of each house. They are not set back and the surface of the street extends to the house walls on either side, often without drains or gutters to carry off storm water. A fair proportion of these streets have been cobbled or paved with stone slabs at some time in the past, but in many villages the surface has now disintegrated and the remaining patches of stone merely accentuate the intervening potholes. The rest of the streets are simply earth tracks between the houses, changing from dust traps to quagmires according to the season of the year. Each village has at least one open space, usually in front of the church or mosque, ringed with coffee-shops, which also serve as general provision stores for the village. Here an odd eucalyptus or cypress tree may furnish a little shade in summer but generally the villages in the plains have but few trees within their built-up areas. The village square may also contain the public well or, if the village possesses a piped water supply, the public drinking fountain. The village houses are for the most part single-storeyed and of mud brick. A fair number have all the main walls plastered within and without, more have the interior and merely one exterior wall (that facing on to the street) plastered, many have no external plastering except around the window and door frames. The house consists of a large room which serves as both living room and bedroom, and one or more small rooms which serve as stores and additional bedrooms. The floor is of gypsum slabs (" marmara ") or of pebble pitching ; the roof is flat and consists of reed matting on poles covered by about eight inches of brushwood and packed earth. There is no heating ; cooking is done in a hive-shaped oven outside the house. The street door usually opens not directly into the house but into a yard of beaten earth, one side of which is taken up by the house itself. Part of the rest is roofed over as a stable for the cattle. In one corner is the manure heap, which may also serve as the family latrine if no proper closet has been installed. The yard probably also contains a well, often uncovered, without coping and but a few feet away from the midden ; from this source the family draws its water. If the householder is a flock-owner, the yard will also serve as a fold for his sheep and goats at night. Each morning and evening the flock will be driven through the narrow streets of the village churning up mud or dust, halting perhaps for watering at the village's public well.

5. In the hill villages, the lay-out is naturally dictated by the site. Usually the hill village clings to the steep face of a mountain with the houses piled, as it were, one on top of another wherever they can find a footing. Here there is no agglomeration along a few well-defined routes ; the streets suit themselves

to the houses rather than the reverse, and the village is connected throughout by a maze of alleys, ramps and narrow terraces by which one may tortuously work up from the orchards and gardens in the valley bottom to the vineyards on the bare hillside above the village. In the larger villages some attempt is made to provide this network of streets with drains to carry off the storm water; these are rarely adequate and after heavy storms a large part of the waste water flows down the streets themselves. In the smaller villages road drainage is the exception and for a considerable part of the winter the streets are little else but streams carrying the run-off from the bare hill tops down to the winter torrent in the bottom of the valley. An occasional wider terrace shaded by mulberry or plane trees, with a coffee shop close by, serves as an open space for the village. A nearby spring provides the domestic water supply and wells in the yards of the houses are much less common than in the plains. The water may be piped to one or more fountains with troughs for watering animals and washing clothes. Often, however, the spring has not been developed in any way and the women and children have the back-breaking toil of carrying the family's water in pitchers from the spring to their houses, sometimes as much as a mile apart. There is no space to spare in the mountain village; the house yards are much smaller and double-storeyed buildings the rule rather than the exception. The houses are built of rough stone with a steep, barn roof of tiles or corrugated iron. Recently bricks manufactured at Limassol have been used to an increasing extent. Much greater use is made of wood for floors, staircases and verandahs, than in the plains. The interior is usually plastered but it is not uncommon, particularly in the poorer villages, to find the rough stone walls left bare. Nearly all houses have some primitive sort of hearth with a hole in the roof and a chimney made of petrol tins to carry off the smoke. The ground floor serves as a stable for cattle and a store for wine and oil. The small yard contains a manure heap, oven and sometimes a latrine of sorts; it also serves as a sty for the pigs which are kept by most village households in the hills. The flocks, however, are usually kept away from the villages in folds ("mandras") built for the purpose.

6. In most villages the only public buildings are the churches, mosques, schools and coffee shops. Some few of the larger villages now possess simple markets for meat and perishables and a fair number have properly constructed slaughter-houses or at least a special place outside the village set apart for this purpose and covered with a roof on poles. Public latrines have been provided in ten villages but so far no attempt has been made to set up in any village a common bath house for public use. With the return to the villages of the Cypriots who have been serving in the armed forces during the war, there may well be a strong demand for such facilities. Very few village houses have any bathroom or washing place at present and if the villagers are to be helped to maintain a higher standard of personal cleanliness than in the past (and the Medical Department regard this as very necessary in order to keep infectious disease in check), then the provision of communal bath houses seems to be what is required.

7. In the bare, arid lands of which so much of the Island's countryside consists, the provision of shade by tree planting is an important amenity. In particular, road-side tree-planting is of real value to all classes of road users in the relief which it affords from the scorching sun of summer; travelling across the plains during the months from July to September is a very wearisome business indeed when there are no trees along the roads to check the glare and the heat. Perhaps the people who feel this most are the summer visitors who receive a distinctly unfavourable first impression of the island if they have to drive along miles of unshaded roads from the ports to the hill resorts. Again, as has been said, there are few trees to be found within the built up areas of the plain villages; trees planted round the open spaces within the village or on vacant plots of land would add much to the appearance of the village and to the comfort of the villager as he sits over his coffee and engages in discussion of his affairs. In the open countryside a good deal of tree-planting is already going on in the 141 areas set aside under the Tree Planting Law and in private land. If the proposals in Chapter IV relating to the establishment of lowland forests and village fuel areas and to the subsidisation of private tree planting are approved, this will probably represent as much as can conveniently be undertaken for the purpose of block afforestation in the plains. In the present Chapter, consideration is confined to roadside and village amenity planting.

8. It is considered that the chief aims in any programme of development for the village communities of Cyprus should be the following :—

(1) the provision of an adequate, pure, piped water supply for every village;
(2) the installation of a proper system of pit latrine sanitation for every village house (this to be undertaken after (1) above);
(3) the improvement of the village streets and drainage;
(4) assistance to the village communities in erecting markets, slaughter-houses, public latrines and communal bath houses;
(5) roadside and village amenity tree planting.

It is realised that these by no means cover the whole field of necessary developments. They do, however, represent the basic needs of the rural communities which should receive first attention.

B.—DOMESTIC WATER SUPPLIES.

9. A scheme for providing every village in Cyprus with a proper water supply has already been approved and a grant of £200,000 has been made for this purpose under the Colonial Development and Welfare Act (Scheme No. D.469). This grant represents one-quarter of the total cost; an equal amount will be provided from the funds of the Colony, and the villages benefiting will be called upon to contribute the remaining £400,000. The total expenditure of £800,000 will be spread over five years from 1946–47. A start has in fact been made with the scheme in a small way during 1945, but until pipes become available in much larger quantities little progress can be made.

10. The apportionment of cost, as between the villages, the Colonial Development and Welfare funds and the Cyprus Government, is that adopted in the case of a previous similar project assisted from the Colonial Development Fund (Scheme No. 373), and the system of requiring the village to pay half the cost of the work is a long-standing and accepted arrangement which is not likely to be questioned by the villagers, who are in general fully alive to the convenience and advantage of a piped supply. The village contribution is customarily provided by means of a loan made by the Public Loan Commissioners and it will be for consideration whether, in connection with this scheme, the funds at the disposal of the Loan Commissioners should be increased. Given some such loan facilities, together with the accumulation of wealth which has occurred in most villages during the war, it should not be beyond the means of the village people to afford the half share proposed. Some exceptions may have to be made; where villages are very poor (and there are some which have benefited much less than the average from the prosperity which the war has brought), the village contribution may be reduced on the advice of the District Commissioner; but the principle of self-help will be maintained, so that even the poorest community will contribute according to its ability.

11. The total number of villages in the Colony is 647, divided between the six districts thus :—

Nicosia	190	villages
Larnaca	60	,,
Limassol	113	,,
Famagusta	100	,,
Paphos	136	,,
Kyrenia	48	,,
Total	647	,,

Of this number, it is estimated that 547 villages require new installations or need substantial improvements to their present supplies. It is intended that some 15 villages should have been dealt with by the end of March, 1946, at a total cost of £22,000. The remainder of the scheme will be spread over the five years as follows :—

In the first year	50	villages
In the second year	85	,,
In the third year	120	,,
In the fourth year	130	,,
In the fifth year	147	,,
Total	532	,,

It is reckoned that about 100 villages will require the installation of pumping machinery in order to obtain an adequate supply; the remainder will be supplied from springs by gravity. Where practicable, villages will be grouped in combined schemes. A volume of fifteen gallons per head of population will be made available daily at street fountains, and proper troughs for watering animals and washing clothes will be provided. The scheme should meet the requirements of the villages for the next forty years.

C.— VILLAGE SANITATION.

12. The domestic water supply scheme can fairly be represented as a prerequisite to the whole process of raising the standard of living in the rural areas of the Colony. Until adequate water is easily available, little advance can be made in regard to latrines, baths and general improvement in the cleanliness of village houses. In view of the disturbingly high figures for typhoid and similar enteric diseases in the Colony the inadequacy of the present sanitary arrangements in the villages needs no emphasis: it is indeed obvious that, while these conditions continue, dirt and disease are inevitable and the wonder is that more illness does not occur.

13. During the war, as a measure primarily intended to enable the villages to receive families evacuated from the towns, power was given to the Director of Medical Services to compel the installation of pit latrines in village houses. By the end of 1943, 11,000 latrines had been constructed under this campaign, the greater part voluntarily by the householders under the guidance of the Department's sanitary staff. The latrines are of the simplest type consisting of a pit covered by a limestone slab. These slabs were supplied ready-made by the Department at a price of 2*s.* 4½*p.* each, which covered the cost of cutting.

14. So long as the villagers are drawing their drinking water from a well in the same yard as the latrine, with only a few feet between the two shafts, the Department obviously must go cautiously about encouraging householders to instal pit latrines. Improvement of sanitation should as a rule wait on the provision of a piped water supply. It is proposed that the Medical Department should follow up the Water Engineer's work on domestic water supplies with a latrine campaign similar to that undertaken during the war; wherever possible this will be tackled as part of the Rural Health Unit programme. Since the sale price of the latrine slabs covers costs, no financial provision is required.

D.—STREETS AND DRAINAGE.

15. A scheme for improving the streets within the villages has been included in the road development proposals in Chapter IX. This aims at improving only the more important streets in each village since, owing to high costs, it is not thought that more can be undertaken during the decennium without upsetting the balance of development. Street improvement will normally include improvement of the roadside drainage but it must be recognised that in many villages, particularly in the hills, there is no real remedy for winter flooding short of laying out the whole village afresh.

16. In a number of cases, however, a great measure of improvement can be secured by widening and deepening existing drains and by diverting flood water away from the built-up areas. Each District Commissioner has put forward detailed schemes for those villages in his district which should be assisted in this way. These are all minor flood-control works, varying in cost from £80 to £1,500, and are such as can be undertaken by the Commissioners with their Village Road Staff. No major flood-control or river diversion schemes have been included.

17. The total cost of the schemes recommended by the Commissioners is £23,700 and it is proposed to insert provision for the whole of this expenditure. As between districts, the cost will be—

	£
Nicosia	6,000
Kyrenia	6,000
Famagusta	2,500
Larnaca	3,200
Limassol	3,000
Paphos	3,000
Total	23,700

It is intended that this scheme should be spread over the six years 1946–47 to 1951–52. No provision is made for maintenance since the villages benefiting will be expected to keep the drains clear and to carry out such minor repairs as may be necessary from time to time.

E.—PUBLIC BUILDINGS.

18. It is proposed that village communities (including the rural municipalities but excluding the summer resorts, which will be considered elsewhere in this Report) should be assisted by grants from public funds to erect markets, slaughter-houses, public latrines and communal bath houses of a simple "standard" design appropriate to Cyprus conditions. Such assistance will be conditional upon the villagers agreeing to contribute the remainder of the cost and the proportion which the Government grant will bear to the total cost will vary according to the prosperity of the village. The cost is bound to vary considerably as between different localities but as a rough indication it may be taken that the whole cost of the buildings will range from £4,500 in the case of a large rural municipality to £400 in the case of a small village; the contribution from public funds will vary from £1,500 to £200 per village.

19. On this basis the District Commissioners have prepared schemes the total cost of which amounts to £135,000; of this £55,000 is to be recovered in the form of village contributions, the remaining £80,000 being the cost of the Commissioners' proposals to Government. It is difficult to foresee at this stage how much of this programme it will be possible to undertake during the decennium. As has been pointed out in Chapter IX (Roads), considerable demands are going to be made upon the rural people during the ten-year development period for contributions towards a variety of schemes such as water supplies, irrigation works, rural health units and school buildings. In these circumstances and in view of the fact that the public buildings although a serious need in the villages are not of the same order of urgency as, say, piped water or improved streets, it is proposed to insert under this head provision of £40,000 only. This will be disbursed over the second half of the decennium and will be distributed between the districts as follows:—

	Government contribution. £
Nicosia	10,500
Kyrenia	3,800
Famagusta	8,000
Larnaca	5,200
Limassol	6,500
Paphos	6,000
Total	£40,000

These funds will be administered by the District Commissioners and it will be for them to see that the method of "priming the pump" is used to secure the greatest possible measure of development and to reduce to the minimum the residue of the programme remaining to be undertaken after 1955–56.

F.—ROADSIDE TREE PLANTING.

20. The Commissioners already carry out a certain amount of roadside tree planting; but the funds provided are small and do not suffice for adequate protection against flocks; a good deal of the money provided is thus wasted and the actual amount which represents successful new planting each year is very small. During the war the vote has averaged £350, before the war £400; these figures represent the provision for the whole island.

21. If tree planting along the roads at public expense is worth doing and it is considered that for the reasons given in paragraph 7 above this service is of real importance and value, then clearly the annual provision should be considerably increased. The District Commissioners have prepared detailed estimates and on this basis it is proposed to expend £34,000 for this purpose over the ten years. This sum will be distributed between districts as follows (it will be noted that the lion's share goes to Nicosia, Famagusta and Larnaca Districts which have the greatest milage in the arid, treeless plains):—

	£
Nicosia	12,000
Kyrenia	1,000
Famagusta	11,000
Larnaca	6,000
Limassol	2,500
Paphos	1,500
Total	£34,000

With the provision suggested, it is estimated that it will be possible to plant about 30 miles of road each year, or a total of 300 miles over the whole period.

22. It is not proposed to include any provision for amenity planting within the villages. This should be regarded as the responsibility of the villagers themselves. It has been observed that once a village has been provided with a piped water supply, the people are usually prepared to do some tree planting on their own account. During recent years the villagers, particularly in the plains, have become much more "tree minded" and it may not be too much to hope that, if Government takes care of the main roads, the village people will themselves attend to planting in their own villages and along the minor roads.

23. In this connection, the Director of Public Works has drawn attention to the disadvantages which may result from indiscriminate ribbon planting alongside the roads. Trees planted on the inside of bends may obstruct the motorist's view ; ribbon planting tends to create a play of light and shade on the road which may obscure any unexpected obstacle ; an avenue along both sides of a road should not be planted without carefully considering the likelihood of lateral expansion in the future ; as a means of breaking up the monotony of the country side occasional groves and clumps of trees may be more effective than avenues. Against these arguments, it should be remembered that in Cyprus the avenue of trees has a distinct, utilitarian value in providing shade for the road user during the hot summer. These are matters, however, which should be borne in mind by the District Commissioners in administering the scheme and should not, it is considered, affect to any appreciable extent the provision required for roadside planting.

G.—STAFF.

24. Of the above schemes only that relating to village water supplies will entail any increase of staff. The additional staff required in order to complete that scheme within the five years can be recruited locally and is as follows :—

(*a*) Inspector of Water Supplies—1	£230—10—270
(*b*) Assistant Irrigation Superintendent, 1st Grade—2	£180—10—220
(*c*) Assistant Irrigation Superintendent, 2nd Grade—3	£150—10—180
(*d*) Clerks, Unestablished Staff :—	
2nd Grade—2	£144—12—180
3rd Grade—2	£96—6—120
4th Grade—2	£72—6—96

The total provision required for this purpose during the five years of execution is thus £9,346. At the end of this period it will probably be necessary to retain (*a*) and (*b*) for maintenance duties. The residual commitment for this scheme on completion will thus be £710 per annum and this will continue after 1955–56. The cost of the additional staff during the period of construction is included in the total estimate of £800,000.

VILLAGE DEVELOPMENT.

APPENDIX.

Expenditure proposed on schemes included in the programme.

A.—BY YEARS.

Year	Scheme :—Village Water Supplies				
	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
	£	£	£	£	£
1945–46 ..	22,000	—	22,000	11,000	11,000
1946–47 ..	71,436	1,664	73,100	36,550	36,550
1947–48 ..	122,628	1,772	124,400	62,200	62,200
1948–49 ..	173,620	1,880	175,500	87,750	87,750
1949–50 ..	188,012	1,988	190,000	95,000	95,000
1950–51 ..	212,958	2,042	215,000	107,500	107,500
1951–52 ..	—	710	710	—	710
1952–53 ..	—	710	710	—	710
1953–54 ..	—	710	710	—	710
1954–55 ..	—	710	710	—	710
1955–56 ..	—	710	710	—	710
Total 1946–56 ..	768,654	12,896	781,550	389,000	392,550

Year	Scheme :—Storm Drainage				
	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
	£	£	£	£	£
1946–47 ..	7,800	—	7,800	—	7,800
1947–48 ..	3,900	—	3,900	—	3,900
1948–49 ..	3,600	—	3,600	—	3,600
1949–50 ..	3,500	—	3,500	—	3,500
1950–51 ..	2,900	—	2,900	—	2,900
1951–52 ..	2,000	—	2,000	—	2,000
1952–53 ..	—	—	—	—	—
1953–54 ..	—	—	—	—	—
1954–55 ..	—	—	—	—	—
1955–56 ..	—	—	—	—	—
Total 1946–56 ..	23,700	—	23,700	—	23,700

A.—BY YEARS—*continued*.

Year	Scheme :—Public Buildings				
	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
	£	£	£	£	£
1946–47 ..	—	—	—	—	—
1947–48 ..	—	—	—	—	—
1948–49 ..	—	—	—	—	—
1949–50 ..	—	—	—	—	—
1950–51 ..	—	—	—	—	—
1951–52 ..	13,500	—	13,500	5,500	8,000
1952–53 ..	13,500	—	13,500	5,500	8,000
1953–54 ..	13,500	—	13,500	5,500	8,000
1954–55 ..	13,500	—	13,500	5,500	8,000
1955–56 ..	13,500	—	13,500	5,500	8,000
Total 1946–56 ..	67,500	—	67,500	27,500	40,000

Year	Scheme :—Roadside Tree Planting				
	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
	£	£	£	£	£
1946–47 ..	—	2,000	2,000	—	2,000
1947–48 ..	—	4,000	4,000	—	4,000
1948–49 ..	—	6,000	6,000	—	6,000
1949–50 ..	—	6,000	6,000	—	6,000
1950–51 ..	—	4,000	4,000	—	4,000
1951–52 ..	—	4,000	4,000	—	4,000
1952–53 ..	—	2,000	2,000	—	2,000
1953–54 ..	—	2,000	2,000	—	2,000
1954–55 ..	—	2,000	2,000	—	2,000
1955–56 ..	—	2,000	2,000	—	2,000
Total 1946–56 ..	—	34,000	34,000	—	34,000

A.—BY YEARS—*continued.*

Summary.

Year	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
	£	£	£	£	£
1946–47 ..	79,236	3,664	82,900	36,550	46,350
1947–48 ..	126,528	5,772	132,300	62,200	70,100
1948–49 ..	177,220	7,880	185,100	87,750	97,350
1949–50 ..	191,512	7,988	199,500	95,000	104,500
1950–51 ..	215,858	6,042	221,900	107,500	114,400
1951–52 ..	15,500	4,710	20,210	5,500	14,710
1952–53 ..	13,500	2,710	16,210	5,500	10,710
1953–54 ..	13,500	2,710	16,210	5,500	10,710
1954–55 ..	13,500	2,710	16,210	5,500	10,710
1955–56 ..	13,500	2,710	16,210	5,500	10,710
Total 1946–56 ..	859,854	46,896	906,750	416,500	490,250

B.—BY SCHEMES.

Serial No.	Scheme	Paragraphs of Chapter	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
			£	£	£	£	£
1	Village Water Supplies ..	9–11	768,654	12,896	781,550	389,000	392,550
2	Storm Drainage	15–17	23,700	—	23,700	—	23,700
3	Public Buildings	18–19	67,500	—	67,500	27,500	40,000
4	Roadside Tree Planting ..	20–23	—	34,000	34,000	—	34,000
	Total	..	859,854	46,896	906,750	416,500	490,250

CHAPTER XI.

HARBOURS AND PORTS.

A.—THE CUSTOMS DEPARTMENT.

The Island's harbours and ports are under the care and charge of the Customs Department which is organised for this purpose on a district basis. The headquarters of the Department, comprising the offices of the Comptroller and his Assistant and the departmental accounting office, are at Famagusta. Duties connected with the routine administration of the Famagusta harbour are the concern of a Collector of Customs and a Harbour Master, both of whom are qualified pilots. At Larnaca and Limassol are stationed Collectors of Customs who are responsible for port work in addition to their customs duties. The harbour at Paphos is in the charge of an Assistant Collector, that at Kyrenia of a Customs and Excise Officer; these two officers work under the supervision of the Collectors at Limassol and Famagusta respectively. Outside Famagusta, there are no qualified pilots and the lack of mariners trained in the technical side of port work at the other coastal towns is plainly a defect in the present harbour administration. The Comptroller intends, as soon as the staff position in his Department permits, to station at Limassol a resident port officer who will also supervise the Paphos harbour; in the same way it is proposed to make one of the port officers at Famagusta responsible for Larnaca. This scheme is bound up with the question of filling vacancies which have existed in the Department for some time past (e.g. the post of Assistant Comptroller has been vacant since before the war) and will not constitute a measure of reconstruction such as to require examination here as a development project.

B.—THE PORTS AND HARBOURS.

1. FAMAGUSTA.

2. Famagusta harbour, which during the fourteenth century was not only the chief port of the Island but was also the most important market of the Eastern Mediterranean, was allowed to fall into disuse during the Turkish Occupation. At the time of the British Occupation it was choked with mud and rubble and useful only for very small sailing craft. The restoration of the harbour was undertaken in 1903 in connection with the construction of the Government Railway from Famagusta to Nicosia and by the middle of 1906 a basin had been dredged over an area of 900′ × 600′ to a depth of 24′ at low water, with an approach channel 250′ wide and 26′ deep; the curtain wall of the old fortress had been pierced with three arches giving access from the town to a new quay 900′ long with a depth of 24′ of water alongside; an additional basin 400′ × 200′ with a depth of 15′ at low water and a jetty 300′ long was also provided for sailing craft. The intention of the scheme was to provide a wharf capable of berthing two steamers and a harbour which could serve the coasting traffic and small sailing vessels trading in the Eastern Mediterranean. The cost of the work was £126,600 which was provided by a loan under the Colonial Loans Act, 1899.

3. In 1930 a second scheme was undertaken with the purpose of enlarging the deep-water basin and of extending the wharf so as to double the berthage accommodation; at the same time the entrance to the harbour was to be enlarged. The justification advanced for the scheme was the expansion of the commerce of the port since 1906 and the increase in the size of the vessels calling at Famagusta. The main part of the scheme was completed between 1931 and 1933 at a cost of £192,000. The minor works which remained were undertaken as normal P.W.D. works during the ensuing seven years and the final cost of the scheme was £209,000. The total cost of the major improvements effected in Famagusta harbour since the Occupation is thus £335,600.

4. The harbour so created comprises a wharf 1,750′ long with a depth of 24′ of water alongside; a basin 24′ deep and 1,800′ long by 700′ broad, an entrance to the north 300′ wide, and a deep-water approach channel; during 1942 to 1945 an additional schooner basin has been dredged to a depth of 10′ to the south-east of the deep-water basin. The wharf lies on the landward side of the harbour at the foot of the ancient fortress. The other sides are enclosed by sandflats to the south, small islands to the east, and an ancient mole on the north. The railway line is laid on to the wharf so that vessels can be unloaded direct into the trucks. Outside this enclosed harbour a reef projecting northwards from the islands, which form the eastern barrier of the harbour, and parallel to the shore provides a partially protected anchorage some 7,000′ long by 3,000′ broad. The entrance to the inner harbour opens into this protected water and seas running direct into the harbour from the north are of rare occurrence.

5. In 1935 the Cyprus Government decided that the prospects of expansion of commerce at Famagusta, particularly in regard to tourist traffic, were such as to justify seeking the advice of the Consulting Engineers on the possibility of creating a large outer harbour there. The proposal was to construct a sea-wall along the reef; it was suggested that this scheme, which would provide an extensive safe anchorage for ships

of deep draught, might be of interest to the Admiralty; in fact this proved not to be the case. The Consulting Engineers reported favourably on the scheme subject to certain modifications in the local plan. The scheme outlined three possible degrees of development of the outer harbour, depending on the length to which the sea-wall was carried along the reef. Rough estimates of cost furnished by the Consulting Engineers were £240,000, £340,000 and £450,000 for the three degrees of extension. The scheme also provided for the construction, if need be, of an isolated breakwater between the shore and the northern end of the proposed sea-wall; this would break seas from the north and the outer harbour would thus be almost entirely enclosed; the estimates for the construction of the breakwater were £139,000 and £238,000, according to the area enclosed; this item would be in addition to the cost of the sea-wall along the reef.

6. The Cyprus Government decided that the need for improved harbour accommodation to deal with the rapidly expanding trade of the Island was such as to justify further examination of the outer harbour scheme and asked that the Consulting Engineers should carry out a detailed survey at Famagusta. This request was still under consideration when a new scheme was submitted by the then Comptroller of Customs and Excise which aimed at improving the inner harbour only. It was suggested that if the justification for development was simply the expansion of the Island's commerce and interests of naval defence were not involved, this purpose could be adequately served by extending and deepening the inner basin in the direction of the islands which form the outer wall of the harbour and by constructing wharves on those islands at which large steamers could tie up; such development would have one great advantage over the other harbour scheme, namely, that ships could be unloaded direct on to the quayside without the use of lighters. It was proposed that the new deep-water basin should be dredged to a depth of 34′ (the depth of the Suez Canal at its shallowest part); part of the existing basin might also be deepened to 34′ but no attempt would be made to increase the depth alongside the existing wharves since that would involve their reconstruction. The new wharves erected on the islands would be connected with the mainland by road and railway running on a causeway across the sandflats which enclose the harbour on the south. Comparison with the costs of the work undertaken in 1931 to 1933 suggested that the cost of the new proposal would be about £600,000, but a reliable figure could not be provided until the nature of the sea bed in the area to be dredged was more accurately ascertained. Detailed examination of this scheme had hardly started when the war broke out and further consideration was suspended.

7. The present Comptroller of Customs has submitted for consideration in connection with the development programme a scheme of improvement for Famagusta harbour which represents a modification of the proposals described in the preceding paragraph. He proposes that the extension of the deep-water basin should be dredged to 24′ only, that a sea-wall should be constructed along the ancient mole and on the inner face of the islands instead of the wharves proposed in the earlier scheme, and that vessels should be moored stern on to bollards on the sea-wall and unloaded by lighters. Both this and the earlier scheme would involve the use of a tug for berthing large steamers, and the Comptroller recommends the purchase of a diesel tug boat equipped with fire-fighting appliances.

8. The arguments which have been advanced in favour of further enlarging the harbour may be summarised thus:

(1) enlargement is necessary to cope with present steadily increasing trade;
(2) this is particularly true in regard to orange export, but other trade has also increased in the last 10 to 15 years, e.g. carobs since the establishment of kibbling factories at Famagusta, and minerals;
(3) the harbour would attract more tourist ships if better facilities were afforded;
(4) the cargo boats calling at Cyprus are increasing in size and the present harbour is too small and too shallow to take vessels exceeding 420 feet in length and 23½ feet draught;
(5) large passenger steamers would be more ready to come to Cyprus and the steamship lines would be more likely to maintain regular, adequate services, if good, all-weather harbour facilities were provided.

An indication of the expansion of commerce which has occurred at Famagusta and on which the justification for further enlargement would depend is provided by the following statistics:—

	1923	1933	1939
(1) Number of steam vessels entered	105	275	339
(2) Tonnage of steam vessels	122,772	403,727	488,494
(3) Number of sailing vessels entered	644	278	168
(4) Tonnage of sailing vessels	20,589	11,808	8,906
(5) Total value of imports	£405,123	£522,283	£1,052,144
(6) Total value of exports	£181,560	£138,217	£337,808
(7) Port dues and wharfage	£3,162	£9,442	£14,761
(8) Import duty (including goods cleared at Nicosia)	£37,697	£114,610	£207,453

2. LARNACA.

9. In Turkish times, Larnaca was the commercial centre of the Island and its principal port. The foreign business houses and consulates were located there, also the Turkish commercial court. The only passable carriage road in the Island was that connecting Larnaca with Nicosia, the administrative capital. The port had, however, no harbour or pier ; vessels stood off in the open roadstead and were unloaded by lighters. Four years after the British Occupation, a pier of open screw pile work 450′ long, was constructed. In 1908–09 this was extended to 900′ and a solid sheltering arm 250′ long was constructed across its head ; the cost of this scheme was £27,000. In 1923 a quarantine jetty 400′ long was constructed at a distance of 800′ to the north of the main pier.

10. In 1925, largely as a result of agitation from the commercial community of Larnaca who feared that the superior port facilities of Famagusta would cause the diversion of their established trade to that port, the Consulting Engineers were asked to carry out a detailed survey and to submit proposals for the improvement of the port of Larnaca. Their report was not encouraging ; they concluded that the bay of Larnaca was beyond doubt slowly silting up and that this action must have been going on for a great number of years. They recommended that an area on either side of the extension added to the pier in 1908–09 should be dredged to 7′ 6″. They also put forward as a suggestion for future accommodation, should the trade of the port justify the expenditure involved, the construction of an open screw pile extension of the existing sheltering arm 200′ long with a depth of water of 9′ alongside so as to provide berthage for coasting vessels ; the cost of this extension was then estimated to be £22,000. In the following year, in response to further representations by the commercial community of Larnaca, the Consulting Engineers provided estimates for extending the pier in a direct line seawards. They provided three progressive estimates :—

(*a*) for an extension of 650′ to provide 10′ or 11′ of water at the pier head, £50,000 ;
(*b*) for an extension of 950′ to provide a depth of 12′ to 13′, £65,000 ; and
(*c*) for an extension of 1,250′ to provide a depth of 15′, £82,000.

11. None of the proposed extensions was in fact carried out. But an area alongside the existing pier was dredged to a depth of 7′ 6″ in 1934 and 1935 as recommended by the Consulting Engineers in 1925. During dredging it was observed that resilting was occurring at a rapid pace and experience has shown that a good deal of regular maintenance dredging is required even to maintain the depth of 7′ 6″ ; from 1934 to 1938 an average of 11,000 cub. yards was dredged annually. Since 1942 no dredging has been possible and probably the present depth alongside is little, if any, greater than before dredging was undertaken in 1934.

12. In 1939 consideration was given to a proposal that the sheltering arm of the main pier and the head of the quarantine jetty should be extended towards one another to form an enclosed harbour with an entrance 100′ wide facing due north and an approach channel dredged to a depth of 12′ ; it was proposed that the extensions should be in the form of a rubble bank faced with pre-cast concrete blocks and that the open-work parts of the existing jetties should be filled in with a rubble breakwater so as to prevent water from passing into the enclosure except through the entrance to the north. It was claimed that the silting up of the enclosed portion would thus be retarded and that a saving would be effected on maintenance dredging. The intention of the scheme was not to provide a harbour for vessels of any size but simply to provide protection for lighters and other small craft. The Public Works Department estimated that the cost of the scheme, omitting the filling-in of the open work jetties (which it considered would accelerate and not diminish silting), would be £45,000. The Consulting Engineers, whose advice was sought on the proposal, asked for detailed soundings to be obtained in order that they might advise as to the alignment of the breakwaters ; this information was collected but owing to the outbreak of the war the scheme was not proceeded with.

13. The Comptroller of Customs has suggested for inclusion in the development programme that the main jetty at Larnaca should be extended by an additional 600′ giving a total length of 1,500′ and a depth at the head of 10′ to 11′. The cost of a 650′ extension was estimated by the Consulting Engineers in 1926 (see paragraph 10 above) to be £50,000 ; it would now hardly be less than three times that sum.

3. LIMASSOL.

14. The port of Limassol is also merely an open roadstead where vessels are loaded and unloaded by means of lighters. It has the advantage of Larnaca in regard to the depth of water alongside its piers. The main pier was constructed about 1882 and was widened in 1914 ; its length is 600′ and the depth of water at the head is 15′. A second pier also 600′ in length, was constructed nearby in 1938. There are in addition three small jetties which are used for quarantine and loading carobs.

15. The Comptroller of Customs has suggested that one of the main piers and one of the small jetties should each be extended by a further 200′ so as to give a depth of 21′ and 13′ respectively at their heads. The pier should be widened by 9′, the present pier head removed and re-erected at the head of the new extension and the rails removed so that rubber-tyred trolleys can be used. The cost of the extensions proposed is estimated at £37,000 for the main pier and £9,000 for the small jetty in question.

4. PAPHOS.

16. The harbour at Paphos is enclosed on the west and east by ancient sea walls. The protection which these afford is partial only since the sea has broken through at several points; moreover, the entrance between them is some 1,000′ wide and faces south-east from which direction gales are not infrequent. In rough weather the harbour is decidedly dangerous.

17. At the time of the British Occupation the harbour was found to be seriously silted up and of little use for any but the smallest craft. About 1888 a jetty 175′ long was constructed; in 1906 a scheme for dredging a large basin to a depth of 22′ at a cost of £105,000 was prepared; this was not undertaken, but between 1909 and 1911 a basin in the middle of the harbour and extending round the head of the jetty was dredged to a depth of 8′ with an entrance channel 150′ wide.

18. In 1939–1940 work was started on patching up and extending the west mole so as to provide greater protection for lighters and small sailing craft. The work then had to be abandoned owing to lack of cement.

19. The Comptroller of Customs has proposed for inclusion in the development programme that the work begun in 1939 should be completed, the jetty extended and the basin dredged to a depth of 15′. A rough estimate of the cost of carrying out these proposals is £11,000.

5. KYRENIA.

20. The small harbour at Kyrenia (the only enclosed port on the northern coast) is protected on the west and east by sea walls which were constructed between 1886 and 1890. The protection so afforded is far from complete and Kyrenia is in fact a risky anchorage; the entrance faces due north, which is the direction of the prevailing wind in winter, the circular shape of the enclosed area and the narrowness of the entrance cause heavy seas to fan out inside with disastrous effect on any vessels lying at anchor and the harbour, particularly on the eastern side, silts up rapidly. The whole of the northern coast of Cyprus in fact has a bad reputation among mariners owing to the rocky and steep nature of the sea bed, which makes bad holding ground, and the rapidity with which the sea rises as soon as the wind blows from the north. Even in a moderate breeze from that direction, steamers lying off Kyrenia have to up anchor and coast up and down or seek the protection of the Anatolian shore 40 miles away to the north.

21. In 1925 the Consulting Engineers prepared a scheme for improving the Kyrenia harbour; they stressed that their proposals sought merely to reduce, not to remove, the danger of the enclosed anchorage. They proposed to extend the two sea walls thus narrowing the entrance from 160′ to 100′ which would reduce wave action inside the harbour, and to dredge the eastern half to 10′ at low water thus affording a more sheltered mooring berth under the lee of the eastern sea wall; this would involve the removal of an ancient lighthouse and mole which now obstructs that section of the harbour; a certain amount of dredging was also to be undertaken in the south-eastern corner. The cost of these improvements was estimated to be £12,000; with the exception of certain minor improvements to the eastern sea wall, they have not been put into effect.

22. The people of Kyrenia have represented that since the beginning of the century the port has suffered a serious progressive decline in coasting trade carried by small craft, which they attribute wholly to the shortcomings of the harbour. The following figures do not conclusively prove or disprove the justice of this complaint :—

Annual average for periods :—

	1900–09	1910–19	1920–29	1930–39
1. Number of steamers calling	18	5	4	13
2. Tonnage of steamers calling	11,355	6,771	6,526	19,693
3. Number of sailing vessels	163	81	76	50
4. Tonnage of sailing vessels	3,126	1,644	1,773	1,281
5. Value of imports	£12,567	£5,064	£8,157	£9,325
6. Value of exports	£19,638	£18,310	£28,075	£16,802
7. Port dues and wharfage	£360	£199	£199	£420
8. Import duty	£808	£427	£1,131	£2,744
9. Tons of carobs shipped	1,908	2,419	3,395	3,352

It is argued that if a safe winter anchorage for small coasting vessels were provided the trade which has been lost to other ports would be attracted back to Kyrenia.

6. MINOR PORTS.

23. In addition to the ports described above there are several small harbours and shipping stations for minerals and carobs round the coasts of Cyprus. Although the improvement of the port facilities at these places, particularly at Latchi and Karavostasi, would be desirable such schemes cannot be regarded as of more than secondary importance and it is not considered that they warrant inclusion in the development programme.

C.—DREDGING PROGRAMME.

24. It is considered that the cost of those schemes described above which involve structural alterations to the existing harbours and piers would at the present time be, if not absolutely prohibitive, at least so high as to leave room for doubt (in the present state of uncertainty as to the future of the Island's sea-borne trade) whether such expenditure could be justified by the benefits to be derived. With current costs of labour and materials, the Famagusta improvement schemes, whether for the outer or for the inner harbour, would cost not less than £1 million ; at Larnaca the addition of 600′ to the existing pier would cost £150,000 or more, the enclosed harbour not less than £120,000 ; the extension of the pier and jetty at Limassol £46,000 ; the additions to the sea-walls at Kyrenia £9,000 ; an exception might be made in favour of Paphos where the cost of patching up and extending the western mole is comparatively small and work has already been started (see paragraph 18 above) ; a sum of £2,500 would suffice to complete the scheme. Apart from this, it is not proposed that any provision should be inserted in the development programme for the time being in respect of harbour schemes which involve structural improvements. This recommendation should, however, be regarded as subject to review in five years time when both costs of construction and the needs of the Island's sea-borne trade in regard to improved harbour facilities can be more accurately assessed.

25. In the particular case of Famagusta also, the proposal not to undertake structural improvements should, of course, be regarded as subject to reconsideration at any time within the next five years if the naval authorities shew interest in the development of that harbour ; the benefits, direct and indirect, which would accrue to the port if it were in regular use as a naval base might well be such as to weigh the balance in favour of undertaking structural improvement even with present inflated costs. Nor should the need for consulting the naval authorities be overlooked at any time in the future when the development of this harbour again comes forward for consideration.

26. The arguments against undertaking structural improvements at the present time do not apply to the same extent to improving the ports and harbours by further dredging. The increase in the cost of mechanical dredging is small compared with the great increase which has occurred during the war in the cost of labour and building materials ; nor can there be serious doubt that the Island's sea-borne trade is already such as to justify the comparatively small expenditure involved. It is, therefore, considered that Government would be fully justified in undertaking immediately a dredging programme which, while effecting much needed improvement in the existing ports and harbours, would also be related to any large-scale development schemes, consideration of which is to be deferred for the time being if the recommendation in paragraph 26 above is accepted. Thus at Famagusta further extension of the existing deep-water basin is already a real necessity in order to enable larger vessels to turn within the harbour ; in the past, some of the steamers berthing at Famagusta have been moored only with considerable difficulty and at some risk to both the vessels themselves and the harbour installations. At Larnaca a large amount of dredging can usefully be undertaken alongside the existing jetty. At Paphos, when the western mole has been repaired and extended, it will be desirable to widen the basin in that direction so as to enable vessels to lie up under the protection of the mole ; the basin should also be deepened to 15′. At Kyrenia, the dredging of the eastern section of the enclosed harbour is a necessary part of any scheme of improvement which may be undertaken and, even though the fundamental defect presented by the northern entrance is not remedied, dredging will certainly increase the utility of the anchorage.

27. At present the Cyprus Government possesses one small grab dredger which has been continuously in use since its purchase in 1931, chiefly in Famagusta harbour ; in recent years its services have been required at Larnaca, Paphos and Kyrenia, but it has not been possible to release it from the more important work at Famagusta. It is proposed that a new machine of rather larger capacity than the present dredger should be purchased, that this should be stationed for the time being at Famagusta, and that the existing small dredger should be released for work at the other ports. Instead of the normal type of grab dredger, a machine should be obtained of the kind known as "universal excavator" which can be employed with various attachments for grabbing, excavating and general earth-lifting and pile-driving. This would be a most useful piece of plant for the Public Works Department to have ; the need for a good pile-driving machine has often been felt in the past and with the present high cost of labour, a mechanical excavator for any large job on roads, aerodromes, soil conservation, etc., would result in economy. The excavator would be mounted on caterpillars and for dredging would be floated on an open steel pontoon. The cost, including pontoon, four hopper barges and two launches, would be £11,000 delivered in Cyprus.

28. With the two dredgers it should be possible in the space of about ten years to complete all the dredging which will be required in the inner harbour at Famagusta, alongside the pier at Larnaca, and in the harbours at Paphos and Kyrenia. At this stage, however, it is not proposed to make provision for more than five years, during which the deep basin at Famagusta will be extended to allow the larger steamers to turn easily, the dredged area at Larnaca will be re-dredged to 7′ 6″ and so maintained, the basin at Paphos will be deepened to 15′ and, if possible, a start will be made with dredging to a uniform depth of 10′ in the enclosed harbour at Kyrenia. All these dredging projects will be useful and should be undertaken even though the more ambitious schemes involving structural improvements are not proceeded with; if on the other hand those schemes are in due course put into execution, the cost and volume of the work to be undertaken will be diminished to the extent of the dredging now proposed. At the end of five years the Cyprus Government should be in a better position than it is now to assess whether the cost of these major schemes is reasonable having regard to the requirements of the Island's sea-borne trade. The cost of a five-year dredging programme, as proposed, would be—

	£
(*a*) Famagusta, extension of deep-water basin with 24′ depth, four seasons,	40,000
(*b*) Larnaca, re-dredging to 7′ 6″ and maintenance, three seasons, ...	7,000
(*c*) Paphos, deepening basin to 15′, two seasons, ...	9,000
(*d*) Kyrenia, dredging part of harbour to 10′, one season, ...	4,000
Total	£60,000

A certain amount of maintenance dredging will be required after the five-year programme is completed, even though the major improvement schemes are not proceeded with. For this purpose an annual provision of £2,000 is inserted. It is estimated that the programme outlined above represents rather less than one half of the total amount of dredging which would be required if all the major harbour improvement schemes were in fact to be carried out. The principal task remaining for the dredgers at the end of the five years would be the extension of the basin at Famagusta up to the islands on which it is proposed to erect the new sea-wall or wharves. The cost of such extension, with a uniform depth of 24′, would be between £60,000 and £70,000; this would be additional to the work for which provision of £40,000 is now made. From start to finish, the dredging of the whole inner harbour at Famagusta would take ten or eleven seasons.

D.—SUMMARY.

29. The total expenditure which must be incurred during the decennium in order to give effect to the proposals outlined in this Chapter amounts to £83,500, as shown in the Appendix. Even if none of the large improvement schemes, of which the five-year dredging programme forms part, is in fact undertaken, the increased convenience and safety of the Island's ports which will result from the dredging proposed will, it is considered, be well worth the expenditure of this sum.

HARBOURS AND PORTS.

APPENDIX

Expenditure proposed on schemes included in the programme.

A.—BY YEARS.

Year	Paphos: Repair and Extension of western mole	Purchase of dredging plant	New dredging at Famagusta	New dredging at Paphos	New dredging at Kyrenia	Re-dredging at Larnaca	Maintenance dredging
	Capital	Capital	Capital	Capital	Capital	Capital	Recurring
	£	£	£	£	£	£	£
1946–47 ..	—	11,000	—	—	—	—	—
1947–48 ..	2,500	—	10,000	—	—	3,500	—
1948–49 ..	—	—	10,000	—	—	1,800	—
1949–50 ..	—	—	10,000	—	—	1,700	—
1950–51 ..	—	—	10,000	4,500	—	—	—
1951–52 ..	—	—	—	4,500	4,000	—	2,000
1952–53 ..	—	—	—	—	—	—	2,000
1953–54 ..	—	—	—	—	—	—	2,000
1954–55 ..	—	—	—	—	—	—	2,000
1955–56 ..	—	—	—	—	—	—	2,000
Total 1946–56 ..	2,500	11,000	40,000	9,000	4,000	7,000	10,000

Summary.

Year	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
	£	£	£	£	£
1946–47 ..	11,000	—	11,000	—	11,000
1947–48 ..	16,000	—	16,000	—	16,000
1948–49 ..	11,800	—	11,800	—	11,800
1949–50 ..	11,700	—	11,700	—	11,700
1950–51 ..	14,500	—	14,500	—	14,500
1951–52 ..	8,500	2,000	10,500	—	10,500
1952–53 ..	—	2,000	2,000	—	2,000
1953–54 ..	—	2,000	2,000	—	2,000
1954–55 ..	—	2,000	2,000	—	2,000
1955–56 ..	—	2,000	2,000	—	2,000
Total 1946–56 ..	73,500	10,000	83,500	—	83,500

B.—BY SCHEMES.

Serial No.	Scheme	Paragraph of Chapter	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
			£	£	£	£	£
1	Paphos : Repair and Extension of western mole	24	2,500	—	2,500	—	2,500
2	Purchase of dredging plant ..	27	11,000	—	11,000	—	11,000
3	New dredging at Famagusta ..	28	40,000	—	40,000	—	40,000
4	New dredging at Paphos ..	28	9,000	—	9,000	—	9,000
5	New dredging at Kyrenia ..	28	4,000	—	4,000	—	4,000
6	Re-dredging at Larnaca ..	28	7,000	—	7,000	—	7,000
7	Maintenance dredging	28	—	10,000	[illegible]0,000	—	10,000
	Total	..	73,500	10,000	83,500	—	83,500

CHAPTER XII.

HOLIDAY RESORTS.

A.—INTRODUCTORY.

The attractions of Cyprus for visitors from abroad are the cool climate of the hills in summer, the warm sunshine in the plains and on the coast during the remainder of the year, scenery of great variety and beauty, abundance of fresh foods (particularly fruit and vegetables), ancient monuments of striking diversity and grandeur, a wide range of sport and recreation, a good system of motor roads and fairly comfortable hotel accommodation at prices which before the war were decidedly low and even now compare favourably with hotel tariffs in neighbouring countries. The disadvantages of the Island from the point of view of the visitor trade are the inconveniences of communication by sea or air, its remoteness from the beaten track of the large passenger steamship lines, its lack of properly organized road transport services, the limited accommodation available in hotels, summer cottages and camps and the poor quality of its places of entertainment.

2. The trade of the holiday resorts depends upon visitors from neighbouring countries in the Middle East, especially Egypt and Palestine, visitors from Europe, particularly the British Isles, and local residents. (During the war, Cyprus received a fair number of visitors, mainly officials and Service personnel from territories lying outside the Middle East area, such as India and the African Colonies, but it is unlikely that this trade will be maintained). The two classes of foreign visitor are attracted to the Island for different reasons and to some extent at different seasons of the year; those from the Middle East seek relief from the summer heat of their own countries; those from Europe wish to escape the rigours of a northern climate or to examine the antiquities of the Island and, whichever their subject, time their visit for the cooler seasons of the year. The former are catered for in the hill resorts, such as Platres and Prodhromos; the latter find accommodation in the coastal towns of Kyrenia and Famagusta. There is, of course, some overlapping; summer visitors may spend a week or so at the seaside resorts before or after staying in the hills and a winter visitor who extends his stay beyond June will probably then seek the cool of the mountain resorts. But a general distinction may be drawn between the two types of visitor and between the resorts which cater for them; and in planning any development of those resorts that distinction must be kept in mind.

3. The internal visitor trade, depending on local residents who, like the visitors from neighbouring countries, seek to escape from the heat of the Eastern Mediterranean summer, is confined to the hill resorts. Nearly all the more prosperous Cypriot families spend a few weeks in the hills between July and September; not a few possess their own summer cottages; the remainder rent houses from the village people or stay in hotels. Unlike the visitors from abroad, they do not exclusively frequent the three main hill resorts of Platres, Prodhromos and Troodos. There are several minor resorts, such as Kakopetria and Kalopanayiotis, whose visitor trade depends almost entirely upon local residents and there are many villages which, although not recognised summer resorts, receive regularly an influx of urban families during the summer months.

4. There are thus three classes of holiday resort in Cyprus; the fashionable hill resort which attracts summer visitors from the Middle East, as well as a certain number of the wealthiest local residents, the seaside resort which caters principally for visitors from Europe wintering in Cyprus and the minor hill resort which serves the needs of local townspeople. Clearly, the first two classes are of much greater economic importance to the Island than the third; it is the foreign visitor trade which, in the form of invisible exports, adds to the total prosperity of the Colony and it is on measures designed to make Cyprus more attractive for the visitor from abroad that the central Government should concentrate its efforts. The proposals in this Chapter, in so far as they relate to the development of particular resorts, are thus concerned only with the first two classes of resort; the possibility that some of the minor resorts may in time expand and begin to attract visitors from abroad should not be excluded, but until such expansion does occur, it is not considered that any particular measure of assistance from the central Government, other than, perhaps, priority treatment in regard to streets, water supply and markets under the village improvement schemes outlined in Chapters IX and X above, would be justified.

5. The extent to which Government can properly incur expenditure on the development of the visitor trade must, of course, be decided in relation to the value of that trade, actual and potential, to the Island. As with other trade prospects, it is at the present time very difficult to assess this with any accuracy. It would seem, however, reasonable to assume that the visitor trade will, within the next year or so, at least regain its pre-war level. Any falling-off which may occur in the number of visitors from Europe should be more than compensated for by increased trade from nearby countries; the Island's holiday resorts may reasonably expect to cash in on the prosperity accumulated during the war years in the Middle East. Before the war the number of visitors to Cyprus was increasing year by year; between 1935 and 1938 the total of passenger arrivals rose from 9,200 to 12,100; no separate figures are available to distinguish visitors

from other classes of passengers but it is reckoned that of the total the visitors make up not less than two-thirds. In 1938 the distribution of arrivals by seasons was as follows :—

	January to March	*April to June*	*July to September*	*October to December*	*Total*
Egypt, Palestine and Syria	1,010	2,250	3,890	1,130	8,280
Other countries	510	840	1,580	890	3,820
Total	1,520	3,090	5,470	2,020	12,100

Assuming that of the 1938 total 8,000 were visitors coming to stay at the Island's holiday resorts and allowing expenditure of £15 per head the gross income from the visitor trade during that year was £120,000 ; with present prices a similar number of visitors would bring in not less than £250,000 and probably nearer £300,000. Some idea of the importance of the visitor trade to the Island may be obtained from comparing these figures with those for the Colony's principal agricultural exports ; the total value of the export of carobs is estimated to have been £231,000 in 1939 and £472,000 in 1945, of vine products £131,000 and £539,000, of potatoes £71,000 and £417,000. In the following sections of this Chapter, proposals are put forward for increasing the attractions of the Colony for visitors at a cost over the ten years of £178,200 a sum which can scarcely be reckoned excessive in relation to the present-day value of the Colony's established visitor trade—to say nothing of any further expansion which may occur during the decennium.

6. If the schemes outlined below are to be executed, they should be undertaken as soon as possible. The visitor trade is already reviving ; during 1945 the number of passenger arrivals exceeded 8,500 and last summer saw the first considerable influx of visitors since the outbreak of war. Action to make the Colony more attractive and convenient for the holiday-maker and to establish its reputation as a resort should be taken at once so as to make the most of the short time remaining before more highly organised resorts elsewhere in the Mediterranean recover from the effects of the war and begin to compete.

7. Towards the end of 1945 a Committee, which included representatives of the local hotelkeepers and of other interested sections of the Island's commercial community, was appointed to investigate and report on the measures which should be taken by Government to promote the tourist and visitor trade. The Committee is at the time of writing about to submit its report ; its recommendations have in fact been available in draft for the purpose of compiling the following sections of this Chapter and the proposals outlined below represent in the main the conclusions of the Committee, supplemented in the case of the principal hill resorts by detailed development programmes submitted by the official Summer Resort Boards described in the next paragraph. One important departure from the recommendations of the investigating Committee is recorded in paragraph 27 below. In preparing this Chapter, full use has also been made of such information as could be obtained regarding the methods adopted by the Italian Government in Rhodes for developing that island—with which Cyprus has much in common—as a holiday and tourist resort.

B.—THE HILL RESORTS.

8. The summer resorts are administered by Development Boards appointed under the Summer Resorts (Development) Law, 1938. These Boards consist of the District Commissioner, as chairman, the District Medical Officer, the Divisional Engineer, the Mukhtar (where the resort is a village) and not more than three other persons appointed by the Governor. They have powers of raising revenue, enacting bye-laws and generally regulating matters of a public nature in the area of the resort similar to those of the Municipal Corporations in the towns. Of the nine resorts which have been declared as such under the Law, only three at present attract any considerable number of visitors from abroad, namely, Platres, Prodhromos and Troodos, which are all in the Limassol district. The Development Boards of these three resorts have considered what improvements could be effected either by the Boards themselves or by the Government in order to render the resorts more attractive to visitors from abroad and the schemes examined below are based on their proposals modified in the light of the recommendations of the investigating Committee described in the preceding paragraph.

(i) PLATRES.

9. The village is situated on the southern slopes of the Troodos range and lies on the fringe of the Troodos forest with the Limassol vine and orchard country stretching below. The resort has developed piecemeal out of the original village and presents a somewhat slovenly appearance. Trim villas stand cheek by jowl with unsightly shacks ; some of the hotels have ugly appendages of board and corrugated iron. The resort is badly in need of a comprehensive town plan but before this can be undertaken a 5 feet vertical interval contour survey is required. Generally speaking, the public services provided by the Development Board are adequate but capable of improvement. The resort posesses a fair road system which should be expanded to open up for development new sites to the north and west. There are still some important roads within the resort which are not asphalted and this should be undertaken as soon as possible for the convenience both of motorists and of visitors residing at Platres (the dust during the dry weather can be

very trying). The domestic water supply is satisfactory in quantity and quality but the system of distribution to private houses requires improvement. An adequate market for perishables is already provided but a new slaughter house, well outside the village, is necessary. There is also need for a large central car park and public lavatories. The Board has drawn up a programme of improvements covering all the points mentioned above ; the total cost is estimated to be £13,700 and the Board reckons that, with its accumulated reserve, amounting to about £5,500, and with assistance from Government in the form of long-term loans, it will be able to finance the whole of this programme from its own resources. In fact, it has already put in hand the more urgent projects such as the contour survey.

10. The principal need, however, at Platres, if it is to maintain its attraction for visitors in competition with resorts elsewhere in the Eastern Mediterranean, is to increase its recreational facilities. At present, apart from an occasional excursion into the forest, visitors have little to do during the day except to promenade from one hotel or café to another. For many this may suffice, but there is an increasing demand among the younger visitors for more vigorous pastimes. The Board proposes that a sports pavilion should be erected with tennis courts, a swimming pool, changing rooms, a bar and terrace and a hall suitable for use as a theatre or cabaret. The lease of the pavilion would be put out to tender for a year or so at a time to a manager who would undertake to maintain it satisfactorily and to provide, at his own expense, certain attractions such as a dance band. It is understood that similar amusement centres were constructed by the Italian Government in Rhodes before the war and that these were highly popular with visitors and added much to the reputation of that Island as a holiday resort. It is estimated that the capital cost of such a project at Platres would be £20,000 and it is thought that an annual return of perhaps as much as £2,000 at the present time and not less than £1,000 in the future may be expected from leasing the pavilion. The Board, with the limited funds at its disposal, is not in a position to undertake capital expenditure of this order and suggests that it might receive a grant-in-aid for the purpose. It is not possible at this stage to forecast with certainty the return to be realized from leasing the pavilion during the next ten years and it is therefore proposed that the pavilion should be erected at Government expense, that the leasing should be left in the hands of the Board, that the agreed rent should be collected and paid by the Board into Government revenue and that the question of selling the pavilion to the Board should be reconsidered at the end of, say, five years. For the purpose of the estimate appended to this Chapter, it has been assumed that Government will remain in possession of the pavilion and that an annual rent of £1,000 will be realized as from 1948–49. A suitable source exists from which water could be conducted to and passed through the proposed swimming pool without interrupting irrigation.

11. The Board possesses its own electricity generating plant and supply network. The price of current is high and the supply not altogether satisfactory ; Platres, as well as the other more important hill resorts, should certainly be included in any scheme for central generation and distribution over a wide area which may be devised. The Board's present supply is not, however, so bad as to require alteration and improvement pending the introduction of any such general system of supply.

(ii) PRODHROMOS.

12. The resort of Prodhromos is far less developed than Platres. It contains, besides the original village, one large hotel and a number of cottages which are let by the owners to visitors from abroad and from the Island's towns. The asphalted main road passes near the hotel but not through the village and the roads within the built-up area are no better than those of the ordinary hill village. Before any real development of the resort can take place new, carefully planned access roads must be constructed. In other respects, e.g. water supply and lack of recreational facilities, Prodhromos exhibits all the defects of Platres but in much more acute form. The resort is of fairly recent growth and the Board does not enjoy revenue comparable with that of the Platres authority and cannot therefore provide services on the same scale. The whole of the reserve funds at present at its disposal will be required in 1946 for providing a temporary system of electric lighting pending introduction of a general supply scheme. The minimum requirements of the resort, if it is to continue to attract visitors from abroad, are considered by the Board to be as follows :—

	£
(1) Improvements to drinking water supply	1,500
(2) Asphalting of all main roads within the resort	2,000
(3) Contour survey and town plan (£500, £200)	700
(4) Development roads	6,000
(5) New market, slaughter house and offices for the Board	3,000
(6) Construction of public lavatories	300
(7) Construction of tennis courts	1,000
(8) Contribution towards the cost of canalising irrigation water which is prerequisite to the establishment of a proper road system within the resort	1,000
Total	£15,500

The most that the Board can undertake to do towards meeting these needs is to provide interest and sinking fund charges on a loan of £3,800 to carry out items 1, 2 and 6. It seeks a grant-in-aid from Government to carry out the remainder. It is proposed that a grant of £8,700 should be made available to enable the Board to carry out items 3, 4, 7 and 8. This will leave the public buildings scheme (item 5) for the Board to undertake when it has funds available; the other improvements, particularly the new road development, should bring in additional revenue to the Board which may reasonably hope to be able to afford the £3,000 required for buildings within a few years.

(iii) Troodos.

13. Troodos differs from the other two resorts in that it has not grown out of an existing village. It owes its development to use as a rest camp by the military and as a summer station by the central Government. It has acquired the character of a holiday resort fortuitously and in the comparatively recent past. Apart from Government servants, it attracts few local residents and before the war its visitors were drawn mostly from Europeans living in the Middle East who wished to escape for a week or so from the hot weather in the years when they were not taking leave in Europe. It has two small hotels but for the most part visitors are accommodated under canvas in camps laid out in the forest. The whole resort has the air of a temporary encampment, which indeed it is, for in winter Troodos is abandoned to the snow. A small club house, the property of Government, equipped with four tennis courts, serves as a centre of amusement for visitors.

14. All the land within the area of the resort is the property of the Cyprus Government but the War Department has a right of perpetual user over a large area. All but a very few of the buildings on Troodos are owned either by the Cyprus Government or by the War Department. The income derived by the Troodos Board from the rating of property, which is the main source of revenue for the Development Boards in the other resorts, is thus very small and the Troodos authority sees little prospect of financing any major improvements from its own resources. It has no reserve funds at its disposal and, so long as the land and buildings within the resort remain the property of other authorities, no means of increasing its revenue by rating. There are, however, two large areas of virtually undeveloped land on Troodos which would be very suitable for siting hotels and cottages and from which, if assigned to the Board and so developed, it could hope to derive considerable revenue. The first area is under War Department occupation and is already provided with access roads; the second is State Forest and requires to be opened up by the construction of a new road linking two existing asphalted roads. Before development of these areas could be undertaken, the Board would have to be provided with funds for compensating the military for the removal of War Department buildings from the former area and for constructing the new road through the latter. It is estimated that each of these schemes will cost about £6,000. A further major requirement for the development of Troodos is the improvement of the water supply. Very few of the cottages and none of the camps are at present provided with water-borne sanitation and in the camp area, which is above the Government offices and pumping station, the supply of water is not altogether adequate. Some work has already been done by the Water Supply and Irrigation Department on improving the sources of supply but it is estimated that another £5,000 will be required to enable water-borne sanitation to be introduced generally and any considerable degree of new development to be undertaken. Besides these three main projects, the Board requires funds for the improvement of one of the existing main roads (£2,500) and for the construction of a market, slaughter house, offices and public conveniences (£2,300). It is considered that, if funds amounting to £17,000 are made available by Government for the execution of the three main projects, these minor schemes can be left to the Board to undertake in the reasonable expectation that within a few years its revenue will have increased sufficiently as the result of bringing new land under development, to enable it to afford the £4,800 required.

15. As for recreational facilities, it is considered that there may well be a case for erecting, at Government expense and possibly as an expansion of the existing Government club, an amusement centre similar to that proposed in paragraph 10 above for Platres. The justification for such expenditure must, however, depend on the degree of new development which takes place and the type of visitor which will be attracted to Troodos in future. During 1945, visitors to the resort included an unprecedented number of Egyptians and Palestinians and it may be that during the next few years the character of the resort's visitor trade will undergo a change. It would, therefore, be wise to postpone decision regarding the provision of recreational facilities until a clearer idea can be formed of what is required in order to suit the taste of the majority of the resort's visitors. No specific provision is therefore included for this purpose.

(iv) Unspecified Development.

16. The visitor trade on which the hill resorts depend is very largely conditioned by external factors, such as the economic and political state of the countries from which the visitors are drawn, and, until conditions throughout the Middle East become more stable, it would be rash to prophesy regarding the prospects of the Cyprus hill resorts. It does, however, seem not improbable that the next few years may

witness a sudden, large expansion of the visitor trade from neighbouring countries. If this occurs, both private enterprise and the public authorities concerned must be prompt to effect a corresponding rapid expansion of the accommodation and services available. Entire, new resorts may spring up; at about the altitude of Platres there are at least three charming orchard villages which could be developed along much the same lines as that resort and which are already beginning to attract a few visitors. Again, at any time the foreign visitor trade may overflow into certain of the minor resorts and demand rapid improvement of the roads, water supplies and recreational facilities there. Finally the three major resorts, even though improved by the execution of the schemes above, may prove inadequate to meet the needs of their share of the expanding trade and may require further development particularly in the matter of new access roads. Government must be prepared to play its part in consolidating for the Island any such gains in its visitor trade and it is proposed that a lump sum of £15,000 should be set aside for financing unforeseen development projects of the nature of those outlined in paragraphs 9 to 14 above, both in the existing resorts and elsewhere if required.

C.—THE SEASIDE RESORTS.

17. The only seaside resorts of any importance from the point of view of the foreign visitor trade are Kyrenia and Famagusta. Paphos does, it is true, attract a few visitors whose interest in antiquities reconciles them to the tiring journey but these are exceptional and the town has never shown any sign of developing a steady visitor trade. Limassol and Larnaca are almost entirely commercial centres and have nothing to commend them to visitors for a long stay. The fishing village of Boghaz on the Famagusta coast occasionally attracts a few visitors from abroad (notably in 1945, when its small hotel was full during the late summer and autumn) and may merit further consideration in the future if this trade appears to be on the increase.

(i) KYRENIA.

18. The town is beautifully situated on the sea shore, with the rich coastal plain stretching on either side and the mountains of the northern range behind. The town possesses an impressive castle, of Venetian imposed on Lusignan construction, in remarkably good repair, and a picturesque enclosed harbour. Four miles away by road are the imposing ruins of the castle of St. Hilarion and the abbey of Bella Paise. Save for about two months in mid summer when the heat and humidity are oppressive, the climate of Kyrenia is good; during the spring and autumn it is delightful. The town is clean and well-kept; it possesses good main roads, a satisfactory market and a piped water supply which is adequate in quantity but requires improvement in regard to the house-to-house distribution. There are two hotels one of which, possessing 116 beds which are shortly to be increased to 158, caters mainly for visitors from abroad. An indication of the pre-war foreign visitor trade of Kyrenia is afforded by the following figures shewing the average number of visitors per night staying at this hotel (for comparison the figures for 1945 are added):—

	Average No. of visitors per night.					
	1936	1937	1938	1939	1945	
January	—	52	47	39	19	
February	23	60	63	53	19	
March	23	63	73	63	22	
April	37	43	48	47	41	
May	48	37	37	27	48	
June	65	26	31	56	46	
July	25	26	19	15	65	overflow of visitors from the hill resorts.
August	36	42	20	12	99	
September	66	48	41	10	66	
October	49	36	27	11	51	
November	48	30	23	13	21	
December	53	37	40	13	8	
Average	43	42	39	30	42	

19. Visitors to Kyrenia pass their time in bathing (there is a good natural pool at the foot of the castle and along the coast are to be found numerous small sandy beaches) and in excursions to the ancient monuments and other places of interest in the District. There is also a small private club near the bathing pool with one tennis court; a primitive golf course was laid out before the war but was ploughed up some five years ago. A small cinema operates intermittently; there is no cabaret but the principal hotel has a dance floor and the management sometimes provides an orchestra. Some increase in the recreational facilities of the resort would doubtless render it more attractive to most of its visitors; it is understood, however, that the proprietor of the principal hotel is preparing to construct a number of tennis courts which will be open to the public, to lay out a beach and playground for children, and to erect a bathing and dance pavilion on a rocky islet in front of his hotel. These improvements should go a long way towards meeting the need for increased recreational facilities and it seems doubtful whether it will be necessary for Government to supplement private enterprise in this respect at Kyrenia.

20. Apart from its climate, however, the main attraction of Kyrenia will always be the beauty of its scenery and ancient monuments. In regard to the latter Government can do much to increase the attractiveness of the resort and proposals to this end are outlined in paragraph 23 below.

(ii) FAMAGUSTA.

21. The attractions of Famagusta for the visitor from abroad are in general similar to those of Kyrenia. It offers excellent sea bathing, antiquities of exceptional interest in both the Old Town and at Salamis, four miles away, and comfortable hotel accommodation. The town itself is clean and, although lacking the scenic beauty of Kyrenia, not unattractive, being surrounded by orange groves. Famagusta does not, however, depend on or cater for the visitor trade to the same extent as Kyrenia (in 1938 it had an average of 27 visitors per night at its hotels, the peak being in April with an average of 37); its port traffic and citrus industry are of far greater importance. The ordinary public services such as roads, electricity and water supply are provided, as at Kyrenia, by the municipality and are adequate although capable of improvement; there would not appear to be any case for Government assistance in this respect. The town has a golf course and several tennis courts but in general lacks recreational facilities. It is proposed that an amusement centre, somewhat similar to that suggested for Platres in paragraph 10 above, comprising a dance floor, terrace, bathing cabins and tennis courts should be erected on the beach at Famagusta with a diving tower in the sea nearby. The cost will be not more than £8,000. It should be leased on contract in the same manner as is proposed for the sports pavilion at Platres. Annual revenue of £500 may be obtained.

D.—ANTIQUITIES.

22. It is not proposed to examine in this Report the case for expanding the existing antiquities service and undertaking an ambitious programme of archeological research. That a good case for so doing exists in a Colony such as Cyprus which is unique in the British Empire in the variety and interest of its archeological remains, few can doubt; but this is a question falling to be considered elsewhere than in a Report which is concerned with the economic development of the Island and the social welfare of its people. This is not to say that the antiquities of the Colony do not constitute one of its main, perhaps its chief, attraction to a certain class of visitors from abroad; from this aspect the preservation and improvement of the Island's ancient monuments must receive attention in the present connection, the test being, however, not the scientific, archeological value of the work but the degree to which it will render more enjoyable and interesting the ordinary visitor's stay in the Island.

23. The vast range of ancient remains in Cyprus renders selection both necessary and difficult; necessary, because, even applying strictly the test indicated in the previous paragraph, it would still be possible to expend a disproportionate large sum on antiquities; difficult, because there is throughout the Island so much to excite the interest of even the most casual visitor. Considerations of cost, however, narrow the field; giving the fullest weight to the value of the visitor trade to the Island and of the Island's antiquities to the visitor trade, it is scarcely possible, having regard to the claims of other services, to justify expenditure of more than about £50,000 on this aspect of development over the next ten years. This cuts out at once any big project such as a major excavation at Paphos or Salamis, costing perhaps £80,000 or the clearance and partial restoration of Famagusta Old Town, which again would cost from £80,000 to £100,000. A possible course would be to aim at improving the appearance of the dozen or so principal and most visited monuments in the Island, e.g. the Famagusta and Nicosia Cathedrals, the fortifications at Famagusta, the castles of Kyrenia, St. Hilarion and Kantara, the abbey of Bella Paise, the Mosque of Umm Haram at Larnaca, Kolossi Castle at Limassol, the excavated sites at Episkopi, Vouni and Soli. But it is questionable whether it would be expedient to spread the limited amount available even so wide as this. If such expenditure is to be justified, the result must be such as to impress the visitor with the ease with which he can reach the ancient monuments and the trouble which is taken to make his visit enjoyable and interesting. Unless unlimited funds are to be spent, this demands a very restricted field of expenditure. In Cyprus, Kyrenia with the nearby monuments of St. Hilarion and Bella Paise provides an exceptionally good opportunity for producing, at comparatively little expense, an impression among visitors of beautiful, easily accessible, interesting and well preserved monuments and of earning a reputation outside the Island as one of the outstanding resorts of the Eastern Mediterranean. A scheme for this purpose would include the construction of asphalted roads from Kyrenia to Bella Paise and St. Hilarion (the present earth roads are scarcely passable in winter), the removal of modern buildings from within

Kyrenia castle (which now serves as a Police Training School) and the laying out of a garden in the great court of the castle, a certain amount of judicious tree-planting and an increase in the number of guides and explanatory material available at each monument. It is estimated that a scheme on these lines would cost £30,000 *plus* recurrent provision of £600 per annum for additional staff. It is proposed that the items of capital expenditure should be accepted as a charge against development funds; they are as follows:—

(1) Asphalting road to St. Hilarion	£7,900
(2) Asphalting road to Bella' Paise	£8,300
(3) Clearance of Kyrenia Castle	£9,200
(4) Improvement of amenities at the 3 monuments	£4,600
Total	£30,000

24. A major antiquities attraction for visitors from abroad is the Cyprus Museum at Nicosia and, however short their stay in the Island, most visitors find time to include it in their programme. Before the war a visit to the Museum always featured on the one-day tours arranged for parties from cruising steamers. The Museum galleries, erected as a memorial to Queen Victoria, were last added to in 1924 and though space was gained when the Museum was arranged on modern lines in 1935, the material has long out-grown the accommodation available for its display. Most serious is the lack of space for the exhibition of the medieval material—Early Christian, Byzantine, Lusignan and Venetian periods—more readily appreciated by the average visitor than earlier objects and very relevant to the monuments most frequently visited, which are of medieval date.

25. The Director of Antiquities has prepared somewhat ambitious plans for additions to the existing Museum building at an estimated cost of £67,000. A revision of these plans comprising a single addition on a much more modest scale, but capable of later extension, has also been prepared. The cost of the latter is estimated at £16,000 *plus* £4,000 for equipment of all kinds. It would provide the additional accommodation which is most urgently needed, including exhibition galleries for the medieval collection and a library on the main floor and workshops, etc., in a basement below.

26. On the grounds purely of its contribution towards the promotion of the visitor trade, even the revised scheme costing £20,000 could scarcely be justified in view of the demands from other services on the development funds likely to be available. But there is a second consideration which suggests that expansion of the Museum, at least to the extent of the revised plan would be a sound investment. At the present time there is at the Museum an almost entire lack of those technical facilities and equipment, which concern the student and the specialist rather than the average visitor. The importance of the former is out of proportion to their small numbers, for they are potential excavators. An excavation on the scale of those conducted by the Swedish Cyprus Expedition between 1928 and 1932 would now bring about £80,000 into the Island, while in the remains laid bare and by the objects with which it would enrich the Museum the Island's antiquities attractions would be enhanced. The lack of laboratory, photographic and library facilities and of workshop and study accommodation in the central Museum is a serious drawback to archeological work in the Colony. Excavators in the past have been handicapped on this account and it can fairly be said that the provision of these facilities would greatly add to the attractions of Cyprus for the intending excavator in the future. When the contribution which the proposed extension of the Museum would represent to the development of archeological investigation and the variety of direct economic benefits which that may bring to the Island are taken into account in addition to the value of the Museum to the ordinary visitor trade, it is considered that a sufficient case exists for undertaking the revised scheme and for charging the cost, £20,000, to the development programme. A small increase in recurrent expenditure will be involved which will be accepted as a normal charge against the departmental estimates.

27. The limitation of expenditure implied in paragraph 22 above is the principal point of difference between the proposals in this Chapter and the recommendations of the investigating Committee to which reference is made in paragraph 7 above. The Committee, being impressed by the fact that the antiquities of Cyprus are unique in the British Empire and constitute probably the Island's most valuable asset for attracting visitors from the United Kingdom and cruising vessels, suggests that the development of those antiquities on a large scale should be put in hand on the lines of a comprehensive programme prepared by the Director of Antiquities which proposes capital expenditure of £380,000 and involves recurrent expenditure rising to £19,000 per annum in 1955–56. That the execution of such a programme is highly desirable is beyond doubt; that a good case can be made out for treating the preservation of the Island's antiquities as an Imperial obligation of which no more than a small part should be charged against the Colony's resources is probable; but that the undertaking of so ambitious and costly a programme can be justified solely in the interests of promoting the Island's visitor trade is not a proposition which can be accepted if due regard is had to the total value of that trade and to the value of that part which depends on visitors attracted to the Island by antiquarian interest. The proposals outlined in the preceding five paragraphs, involving expenditure of £50,000 represent, it is thought, a more realistic appreciation of the economic value of the Island's antiquities.

E.—SPAS.

28. There are mineral springs at a number of places in the mountains below Troodos. Of these the most important are the springs at Kalopanayiotis, a minor resort, much frequented by Cypriots, situated on the asphalted road which ascends the Marathassa valley from Lefka to Prodhromos. There are four sulphurous springs and one chalybeate ; being moderately saline, they are used internally as well as externally by persons suffering from gout, rheumatism and skin disease. Visitors are accommodated in cottages owned by the villagers in which hip baths are provided ; the rental includes the carrying of water to the cottages. There is also one small hotel.

29. It is questionable whether Kalopanayiotis itself could be developed as a spa attracting visitors from abroad. The village is picturesque but insanitary ; it is enclosed by arid hillsides which have been stripped of forest vegetation and, for all its altitude of 2,350 feet, it is oppressively hot by day during the summer season. Although connected by a good road, it is remote from the principal resorts. The experience of the Italians in Rhodes suggests that the form of spa development which is most attractive to foreign visitors is the provision of a special building in pleasant surroundings and under official management at which they can take the waters in comfort, without feeling on the one hand that hospitalization has overtaken them or on the other that their afflictions are being exploited for profit. In Rhodes such a special building was erected and maintained by the Italian Government at a distance of about 5 miles from the town and visitors came out by bus each morning to take the waters, returning to their hotels and other relaxations for the rest of the day. The spa, which was extensively advertized throughout the Middle East, attracted each year about 1,500 persons who came to take the cure, besides the relatives and friends who accompanied them.

30. In Cyprus it seems probable that a suitable site for such a building could be found at the source of one of the undeveloped mineral springs in the Troodos range. There is at least one such spring within a few miles of Platres ; obviously it would be of advantage if the site chosen for development as a spa were easily accessible from the established resorts. A survey of mineral springs in the vicinity of the summer resorts is now being undertaken and pending the results no final selection of a site can be made ; but there seems to be a very fair prospect that one or other of these springs will prove to be adequate in volume, abundant in medicinal properties, and both pleasant and convenient in situation. A building equipped with pump room, a small clinic and changing rooms to serve 50 persons taking the waters would cost £10,000 ; to this must be added the recurrent cost of pumping the water and of staff and maintenance which would be about £1,500 per annum, on the basis of a season of six months from May to October. In order to cover these recurrent costs while keeping the charge within reasonable limits, the spa would have to attract annually 300 to 400 persons intending to take the full cure. In order to recover the capital outlay this number would have to be doubled. On the analogy of Rhodes, it should not be impossible to attain the latter figure. It would be necessary to provide comfortable, cheap and efficient road transport for the visitors staying at Platres or Troodos ; the charge made for taking the cure should be inclusive of such transport. In return for the benefit which they would derive from the proximity of the pump room, hotelkeepers seeking permission to construct hotels within the area of the spa could reasonably be required to provide a standard of accommodation rather above the ordinary.

31. The possibilities of spa development in Cyprus on somewhat the lines indicated above and the prospect of materially increasing the Island's visitor trade thereby would appear to be sufficiently promising to warrant further examination ; it is therefore recommended that Government should proceed as soon as possible to obtain the advice of qualified persons who have had experience of this type of visitor trade in the Eastern Mediterranean and who should be requested to visit the Island and survey the possibilities. In the meantime, £10,000 should be inserted in the programme provisionally in respect of the capital cost of the building mentioned in the preceding paragraph and a sum of £500 to cover the cost of obtaining expert advice. Provision is also made for recurrent costs at the rate of £1,500 per annum and for income from visitors using the building sufficient to offset these costs.

32. A scheme such as that outlined above will by no means exhaust the potentiality of the Island for spa development. There would appear to be no insuperable difficulty in providing similar facilities, if a sufficient demand appeared, further afield from the source of the springs, as, for example at Kyrenia. And there are several other beneficial mineral springs in the hill districts outside the area of the principal resorts. But until expert advice has been obtained and the success of any development undertaken in the light of such advice is assured, it is not considered that any further extension of Government's liability in this sphere would be justified.

F.—WINTER SPORTS.

33. During the past ten years, under the stimulus of a few enthusiasts there has been a steady increase of interest among local residents in the potentialities of Troodos for ski-ing. The interest has now spread to the mainland and during February, 1946, the Island was visited by a party of ski-ers from Palestine. This may mark the beginning of a valuable addition to the foreign visitor trade. Save in years of exceptional snowfall the season is limited to the two months February and March. During this period good ski-ing

snow extends from the summit of Troodos (6,403 feet) down to an altitude of about 5,000 feet. The normal condition of the snow is that known in the Alps as "spring snow" which makes for easy ski-ing. Avalanches and crevasses are unknown and the danger of skiers losing themselves is small since an hour's walk downhill will bring them to the snow line. The runs are, of course, short by comparison with the Alps and there is little open country. At present the main drawback to ski-ing on Troodos is the lack of any means of transporting ski-ers up to the good snow; the slopes of the mountain immediately above the snow line are not negotiable on skis, being very precipitous and rocky, and it is sometimes an hour's walk before ski-ers can reach suitable country. The fundamental need in order to make winter sports on Troodos attractive to visitors from abroad is that the main road over the mountain between Platres and Amiandos should be kept clear to enable ski-ers to reach the good ski-ing country by car. If this is done visitors will be able to stay at Platres (two or three hotels keep open during the winter) and to motor up to the snow each day. Other developments for the convenience of visitors, such as the opening of a restaurant and a shop for the sale and repair of ski equipment on Troodos, will follow in the train of keeping open the road. During the 1945–46 season the road has in fact been kept clear partly by hand and partly by the use of an improvised snow plough. In view of the potential value of the winter sports as a means of attracting visitors to the Island, it is proposed that provision of £800 should be made for the purchase of a self-propelled "scraper" (which, when not in use for snow clearance, would be of value to the Public Works Department for earth-moving jobs) and £100 annually for the cost of its operation during the two months.

34. A further facility for ski-ers, which might reasonably be regarded as a charge against development funds, would be the provision of a ski-lift to assist ski-ers in ascending for a short run from the summit of Troodos down to the camp area; including a diesel engine to provide the necessary power, a ski-lift could be erected for about £4,000 and operated for £50 each season. If the winter sports visitor trade develops on any considerable scale, it may be desirable to examine this suggestion further; at the present time the trade is not such as to justify the expenditure.

35. Finally, it should be made a condition of any lease granted for the erection of a hotel on Troodos that it should be suitable for occupation during the winter and should provide facilities for winter sports, such as perhaps, a skating rink. The imposition of such conditions will not involve any expenditure of Government funds.

G.—TOURIST DEPARTMENT.

36. In the past, responsibility for the encouragement of the visitor trade by such means as the organization of publicity, the provision of an information service for intending visitors and assistance to visitors on arrival in the Island has been divided between the Department of Antiquities, the Secretariat and a Trade Development Officer functioning within the Department of Agriculture. It is scarcely surprising that the results have not been entirely satisfactory. The encouragement of the tourist and visitor trade requires special knowledge and capabilities such as are seldom possessed by ordinary civil servants; a certain amount of specialized knowledge, e.g. regarding the management of hotels and organization of publicity, and experience in dealing with shipping companies and tourist agencies are indispensable. It is proposed that the various activities connected with the visitor trade should be made the responsibility of one authority and that a new branch of the public service should be established for this purpose under a Director of Tourism who should have wide experience of tourist business outside Cyprus. The Department, in addition to organizing publicity, arranging for visits by cruising vessels, and generally looking after the interests of visitors on arrival in the island, would undertake responsibility for the inspection of hotels, a duty at present discharged by a body known as the Hotels Board, which, it is generally agreed, is not suitably constituted and equipped for the purpose. The executive work in connection with the control of hotels would be undertaken by an Inspector of Hotels who would be a permanent, full-time officer of Government. The Department would include Tourist Bureaux to be established at Nicosia, Famagusta, Kyrenia, Limassol and possibly at Platres during the summer. Outside Cyprus the Department would work through the Cyprus Information Office in London and the proposed Cyprus Agency in Cairo, which would undertake to arrange passages and accommodation for intending visitors; the Bureaux in Cyprus would also assist visitors in securing hotel accommodation and return passages but their main task would be to arrange expeditions to places of interest in the Island and to assist visitors in such matters as the hire of taxis. The bureaux might suitably be accommodated in ancient monuments in each town. It is estimated that the annual cost of the proposed Tourist Department will be £4,000, the items being as follows:—

	£
(1) Salary of Director	1,000
(2) Inspector of Hotels	350
(3) 4 Managers of Tourist Bureaux at £250 each	1,000
(4) Clerical and subordinate staff	950
(5) Travelling and subsistence	700
Total	£4,000

The capital cost of setting up four Tourist Bureaux such as suggested is estimated to be £5,200.

H.—PUBLICITY.

37. Before the war a sum of £700 to £800 was provided annually for " Advertising ", most of which was expended on advertising the Island as a holiday resort. It is proposed that during the next two years a sum of £1,000 should be made available each year specifically for tourist publicity and thereafter £2,000 annually. For the time being, great care will be required in organizing such publicity. Advertisement of Cyprus on a lavish scale should not precede the construction of more and better equipped hotels; to embark hastily on an advertising campaign at the present time would be an error which it might take years to rectify.

38. A proposal which is at present receiving consideration by Government is that a Tourist Industry Association should be established in Cyprus similar to those already functioning in some other Colonies (e.g. the East African Colonies), to the funds of which Government and the interested trade concerns in Cyprus would contribute on a pound-for-pound basis. If such an association were established, it would presumably in time undertake responsibility for publicity work, and Government's direct activity in this sphere could be curtailed; the provision indicated in the preceding paragraph should be regarded as available, if required, for the purpose of supplying Government's contribution towards such an association.

I.—HOTELS.

39. There are only three first-class hotels in the Island of which one is very small. Certain of the other hotels offer a reasonable standard of comfort but it must be admitted that in general the accommodation available for foreign visitors leaves much to be desired. A substantial improvement in hotel accommodation, in both quality and quantity, is necessary before any great increase in the visitor trade can or should be encouraged. During recent years hotelkeepers have experienced little competition and have had little difficulty in keeping their hotels full and in making large profits. There has been no incentive to maintain a high standard of service and a strong temptation to snatch quick profits without thought for the future. Much money has been accumulated by the hotel industry, but, owing to lack of building materials, no new hotels have been erected and little improvement of existing hotels undertaken. However, once the present difficulties of supply of materials are resolved, there will be no lack of private enterprise willing and able to undertake the erection of new hotels and the improvement of those already existing, and it is not considered that there would be any case for Government to interest itself directly in the erection of the new hotels which are required.

J.—ROAD TRANSPORT.

40. One of the main shortcomings of Cyprus as a holiday resort has always been the lack of comfortable, properly organized road transport services; the only buses are crudely converted lorries and many of the taxis are antiquated, small and generally unsuitable for use as public transport vehicles. Before the war the discomfort and irregularity of the buses and taxis were to some extent offset by absurdly low fares which were the result of uncontrolled, cut-throat competition. During the war, in order to conserve tyres, a strict control of transport has been imposed, the operation of all motor vehicles has been under permit from the Controller of Transport and the numbers of buses and taxis on the roads have been drastically reduced. This reduction in the number of vehicles has presented the transport owners with an opportunity for exploiting the public which they have not been slow to seize; and to the pre-war disadvantages of discomfort and irregularity is now added that of gross overcharging. Regulation of transport rates has gone some way towards checking this but is only partially effective. During the past two summer seasons there has been considerable complaint on the subject from visitors, who are, however, rarely prepared to report specific cases. A committee recently appointed by Government to consider the question of future transport policy in the Island has recommended the enactment of legislation on the lines of the Road Traffic and Public Service Vehicles legislation in force in the United Kingdom, which will enable Government to fix fares and impose standards of comfort, etc., in public transport services. By such means it should be possible in time to raise the standard of the road transport services. The implementation of this recommendation will involve the retention of a part of the war-time transport control and the annual provision of funds for this purpose. Although the improvement of road transport services is of first importance to the development of the Island's visitor trade, the cost of control clearly cannot be represented as a fair charge against development funds and the intention in this paragraph is thus simply to record the need for such regulation of transport services in the interests of the visitor trade.

41. As far as that trade is concerned, the primary need in the sphere of internal communications is the establishment of a service of comfortable buses or motor coaches which would run punctually to a time table, would be able to take a limited quantity of luggage and would serve the main towns and the

principal centres of tourist attraction ; during the summer months an increased service should be provided in the hill resort area. It seems probable that, if given some encouragement by Government, one or other of the several road transport firms at present operating in the Island would be prepared to enter into a contract for providing such a service. The encouragement from Government might take the form of promising to the contractor the support of the proposed Tourist Department or of a concession in regard to the import duty payable on buses of a suitable type to be specified by Government. If, however, it does not in practice prove possible to establish the service by some such arrangement with a private firm, it will be necessary (such is the fundamental importance of this question to the development of the visitor trade) to consider the case for direct Government operation.

K.—EXTERNAL COMMUNICATIONS.

42. The inherent inconvenience to visitors of having to travel by sea or air in order to spend their holidays in Cyprus has in the past been aggravated by the inadequacy of the passenger transport services operating between the Island and the mainland. The position in regard to existing services is explained in Chapter XIV below ; there appears to be a fair prospect that with increased facilities for air transport which will allow for the carriage of sufficient luggage to satisfy summer visitors from neighbouring countries and with the addition of a new passenger steamship service which is shortly to commence operation between Cyprus, Alexandria and Port Said, the inescapable fact that Cyprus is an island will no longer be a serious drawback to its development as a holiday resort.

L.—SUMMARY.

43. The total capital cost of the schemes outlined above for inclusion in the programme is £135,200 ; the recurrent expenditure over the ten years will be £68,000 of which £13,000 will be recovered from the operation of the spa building. A further £12,000 revenue is expected from the lease of the sports pavilions at Platres and Famagusta. Having regard to the value to the Island of its present visitor trade, to the increase in revenue, both direct and indirect, and in general prosperity which will accrue from an expansion of that trade and to the present exceptionally favourable circumstances for establishing the reputation of Cyprus as a holiday resort, the programme outlined in this Chapter may, it is suggested, be accepted as indicating a reasonable assessment of Government's responsibility in regard to this aspect of development. This programme of Government activity is not, of course, more than a contribution towards promoting the visitor trade. The greater share of responsibility in this matter must be borne by private enterprise ; the provision of new and more comfortable hotels, of more efficient road transport and of better cinemas and similar places of entertainment is of even greater importance to the development of the trade than most of the schemes described above. These are, however, essentially matters for private enterprise in which Government should not intervene except to provide encouragement, guidance and, if necessary, regulation in the public interest ; the very considerable expenditure of public funds proposed herein will give Government the best possible title for intervening to ensure that private commercial ventures in this sphere are on really sound lines.

HOLIDAY RESORTS.

APPENDIX.

Expenditure on schemes included in the programme.

A.—By Years.

Year	Improvements to Resorts						
	Platres : Sports Pavilion				Prodhromos : Various Improvements		
	Capital £	Total £	*Less* Receipts £	Net Total £	Capital £	Total £	Net Total £
1946–47	15,000	15,000	—	15,000	8,700	8,700	8,700
1947–48	5,000	5,000	—	5,000	—	—	—
1948–49	—	—	1,000	8,000	—	—	—
1949–50	—	—	1,000		—	—	—
1950–51	—	—	1,000		—	—	—
1951–52	—	—	1,000		—	—	—
1952–53	—	—	1,000		—	—	—
1953–54	—	—	1,000		—	—	—
1954–55	—	—	1,000		—	—	—
1955–56	—	—	1,000		—	—	—
Total : 1946–56 . .	20,000	20,000	8,000	12,000	8,700	8,700	8,700

Year	Improvements to Resorts									
	Troodos : Various Improvements			Unspecified Development in Hill Resorts			Famagusta : Sports Pavilion			
	Capital £	Total £	Net Total £	Capital £	Total £	Net Total £	Capital £	Total £	*Less* Receipts £	Net Total £
1946–47 . .	17,000	17,000	17,000	—	—	—	—	—	—	—
1947–48 . .	—	—	—	—	—	—	8,000	8,000	—	8,000
1948–49 . .	—	—	—	5,000	5,000	5,000	—	—	500	4,000
1949–50 . .	—	—	—	3,000	3,000	3,000	—	—	500	
1950–51 . .	—	—	—	3,000	3,000	3,000	—	—	500	
1951–52 . .	—	—	—	2,000	2,000	2,000	—	—	500	
1952–53 . .	—	—	—	2,000	2,000	2,000	—	—	500	
1953–54 . .	—	—	—	—	—	—	—	—	500	
1954–55 . .	—	—	—	—	—	—	—	—	500	
1955–56 . .	—	—	—	—	—	—	—	—	700	
otal : 1946–56	17,000	17,000	17,000	15,000	15,000	15,000	8,000	8,000	4,000	4,000

A.—BY YEARS—*continued*.

Year	ANTIQUITIES						SPA DEVELOPMENT				
	Kyrenia: Improvements to Monuments			Museum Extension			(1) Technical Advice (2) Pump Room and Clinic				
	Capital £	Total £	Net Total £	Capital £	Total £	Net Total £	Capital £	Recurring £	Total £	*Less* Savings or Receipts £	Net Total £
1946–47 ..	16,000	16,000	16,000	—	—	—	6,500	—	6,500	—	6,500
1947–48 ..	14,000	14,000	14,000	10,000	10,000	10,000	4,000	1,000	5,500	1,000	4,000
1948–49 ..	—	—	—	10,000	10,000	10,000	—	1,500	1,500	1,500	—
1949–50 ..	—	—	—	—	—	—	—	1,500	1,500	1,500	—
1950–51 ..	—	—	—	—	—	—	—	1,500	1,500	1,500	—
1951–52 ..	—	—	—	—	—	—	—	1,500	1,500	1,500	—
1952–53 ..	—	—	—	—	—	—	—	1,500	1,500	1,500	—
1953–54 ..	—	—	—	—	—	—	—	1,500	1,500	1,500	—
1954–55 ..	—	—	—	—	—	—	—	1,500	1,500	1,550	—
1955–56 ..	—	—	—	—	—	—	—	1,500	1,500	1,500	—
Total: 1946–56	30,000	30,000	30,000	20,000	20,000	20,000	10,000	13,000	23,000	13,000	10,000

SNOW CLEARANCE.

Year	*Capital* £	*Recurring* £	*Total* £	*Net Total* £
1946–47	800	100	900	900
1947–48	—	100	100	100
1948–49	—	100	100	100
1949–50	—	100	100	100
1950–51	—	100	100	100
1951–52	—	100	100	100
1952–53	—	100	100	100
1953–54	—	100	100	100
1954–55	—	100	100	100
1955–56	—	100	100	100
Total: 1946–56 ..	800	1,000	1,800	1,800

TOURIST DEPARTMENT AND PUBLICITY.

Year	*Capital* £	*Recurring* £	*Total* £	*Net Total* £
1946–47	5,200	1,000	6,200	6,200
1947–48	—	5,000	5,000	5,000
1948–49	—	6,000	6,000	6,000
1949–50	—	6,000	6,000	6,000
1950–51	—	6,000	6,000	6,000
1951–52	—	6,000	6,000	6,000
1952–53	—	6,000	6,000	6,000
1953–54	—	6,000	6,000	6,000
1954–55	—	6,000	6,000	6,000
1955–56	—	6,000	6,000	6,000
Total: 1946–56 ..	5,200	54,000	59,200	59,200

Summary.

Year	Capital	Recurring	Total	*Less* Receipts	Net Total
	£	£	£	£	£
1946–47	79,200	1,100	80,300	—	80,300
1947–48	41,000	6,100	47,100	1,000	46,100
1948–49	5,000	7,600	12,600	3,000	9,600
1949–50	3,000	7,600	10,600	3,000	7,600
1950–51	3,000	7,600	10,600	3,000	7,600
1951–52	2,000	7,600	9,600	3,000	6,600
1952–53	2,000	7,600	9,600	3,000	6,600
1953–54	—	7,600	7,600	3,000	4,600
1954–55	—	7,600	7,600	3,000	4,600
1955–56	—	7,600	7,600	3,000	4,600
Total : 1946–56..	135,200	68,000	203,200	25,000	178,200

B.—BY SCHEMES.

Scheme	Paragraph of Chapter	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
		£	£	£	£	£
1. Improvement to Resorts :—						
(i) Platres :—						
Sports Pavilion	10	20,000	—	20,000	8,000	12,000
(ii) Prodhromos :—						
Survey and Town Plan ..	12	700	—	700	—	700
Development Roads ..	12	6,000	—	6,000	—	6,000
Tennis Courts	12	1,000	—	1,000	—	1,000
Canalization of water ..	12	1,000	—	1,000	—	1,000
(iii) Troodos :—						
Transfer of W. D. land ..	14	6,000	—	6,000	—	6,000
Development Road	14	6,000	—	6,000	—	6,000
Water Supply	14	5,000	—	5,000	—	5,000
(iv) Unspecified Development in Hill Resorts	16	15,000	—	15,000	—	15,000
(v) Famagusta : Sports Pavilion	21	8,000	—	8,000	4,000	4,000
2. Antiquities :—						
Access Roads	23	16,200	—	16,200	—	16,200
Kyrenia Castle	23	9,200	—	9,200	—	9,200
Amenities	23	4,600	—	4,600	—	4,600
Museum Extension	25–26	20,000	—	20,000	—	20,000
3. Spas :—						
Pump room and Clinic ..	30–31	10,000	13,000	23,000	13,000	10,000
Technical Advice	31	500	—	500	—	500
4. Winter Sports : Snow Clearance	33	800	1,000	1,800	—	1,800
5. Tourist Department	36	5,200	36,000	41,200	—	41,200
6. Publicity	37	—	18,000	18,000	—	18,000
Total		135,200	68,000	203,200	25,000	178,200

CHAPTER XIII.

PRISONS.

A.—THE PRISONS DEPARTMENT.

1. Before the year 1945, the Prisons, both Central and District, functioned under the direction of the Commissioner of Police in his capacity of Inspector of Prisons; there existed, however, a prison service, distinct from the Police, which provided all the staff for the Central Prison, including a Resident Superintendent, and warders for the District Prisons; superintendence of the latter was the responsibility of the senior police officer in each district by virtue of appointment as Governor of the District Prison. As from the 1st January, 1945, a new, separate department was formed to administer the Prisons and the powers and duties of the Commissioner of Police in the sphere of prison administration were transferred to a Superintendent of Prisons. As a matter of convenience, in view of the lack of trained prison administrative staff and the possibility (to which reference is made below) that the District Prisons might be virtually abandoned, the governance of these Prisons continues for the time being to be vested in the senior police officers in the districts.

B.—THE PRISONS.

1.—THE CENTRAL PRISON.

2. The Central Prison, situated in the western suburbs of Nicosia, consists of three separate but adjacent sets of buildings enclosed by a high, stone wall; (1) two blocks, each comprising 100 isolation cells, for short sentence prisoners, and an execution gallery; (2) two blocks, each comprising 100 isolation cells, for long sentence prisoners and workshops, kitchen, hospitals and punishment cells for both short and long sentence prisoners; and (3) a self-contained block for female prisoners with 18 isolation cells. The main buildings were erected in 1894. They do not appear to have been very soundly constructed and during the past twenty years considerable sums have had to be expended on their repair and reconstruction. The Prison is, moreover, unsuitably sited, being in the middle of an area which during the past ten years has developed into a first-class residential locality and lacking sufficient agricultural land in the vicinity to enable the establishment of a prison farm. Finally the accommodation available is now barely adequate and in the near future, if the present increase in prison population is maintained, will definitely fall short of requirements; during 1945 the daily average number of civilian prisoners (as a war-time measure the Female Prison has been handed over to the military, the women prisoners being accommodated in the Prison isolation hospital) in the Central Prison was 368 men (*plus* 45 at Athalassa, see paragraph 5 below) and 6 women; for 1944 the corresponding figures were 342 (*plus* 45 at Athalassa) and 11. The buildings are, as indicated above, intended to accommodate 400 men and 18 women prisoners.

3. The Superintendent of Prisons has suggested that the whole Central Prison should be removed to a new site, well away from the urban residential areas and embracing agricultural land which could be developed as a prison farm, and that the opportunity presented by the removal should be taken to re-organize the prison into five separate, self-supporting sections for the following classes of prisoner:—

- (i) recidivists; accommodation required for 100 persons; attached to this section there should be a special building to accommodate 20 refractory prisoners whether recidivists, first offenders or juvenile adults;
- (ii) first offenders sentenced to one year's imprisonment and over; accommodation required for 200 persons;
- (iii) first offenders sentenced to less than one year's imprisonment; accommodation required for 100 persons;
- (iv) juvenile adults (juveniles being accommodated in the Reform School at Lapithos, see paragraphs 44 to 47 of Chapter VI, Education); accommodation required for 80 persons;
- (v) females; accommodation required for 20 persons.

He suggests that prisoners of the class (iii) above might perhaps be accommodated in an entirely separate prison nearer Nicosia since they are customarily employed in and around the Government offices.

4. The implementation of the Superintendent's proposals would at the present time cost not less than £150,000 and possibly as much as £200,000. This would be offset to some small extent by the sale of the site now occupied by the Central Prison together with certain Government land adjacent thereto which is now being farmed by prison labour. The value of the site of the Prison is estimated by the Director of Land Registration and Surveys to be at the present time not less than £2,700, that of the adjacent land not less than £8,000; the value of the latter might be enhanced by some £1,000 to £2,000 if the Prison were removed. These estimates are admittedly conservative and recent land transactions in the neighbourhood of Nicosia suggest that, given favourable conditions of sale, the whole property might fetch as much as £25,000. The total area is about 60 acres.

2.—THE ATHALASSA PRISON.

5. Some 40 or 50 prisoners from the Central Prison, mostly juvenile adults and good conduct prisoners nearing the end of their sentences are regularly employed on agricultural work at the Athalassa Stock Farm where, in view of the distance from the Central Prison (some six miles), they are permanently accommodated.

Until 1945 they were housed in dilapidated farm buildings but during last year two dormitories were constructed, each providing accommodation for 24 prisoners, with a kitchen and wash house. It is proposed to construct during 1946–47 as part of the ordinary Public Works programme one further dormitory of similar capacity with accommodation for warders and an office. The buildings will be fenced off completely to form a separate, ancillary prison with accommodation for 72 prisoners. It will then be possible to keep all the juvenile adults at Athalassa.

3.—THE DISTRICT PRISONS.

6. There are prisons in the district towns of Famagusta, Larnaca, Limassol and Paphos, each providing accommodation for from 20 to 30 prisoners. Of these only that of Paphos can be regarded as in any way conforming to modern standards of prison accommodation ; the remainder are primitive lock-ups which are clean and weather-proof but which have little else to commend them as prisons (although of considerable interest as ancient monuments). The District Prisons are at present used to accommodate persons awaiting trial, a number of short sentence prisoners, which rarely exceeds 100 in all or 40 in any one prison, and a handful of long-sentence prisoners whom the Superintendent considers it desirable to remove for a time from the Central Prisons. During 1945, the daily average prison population in the District Prisons was as follows :—

Famagusta	37
Larnaca	28
Limassol	18
Paphos	32
Total	115

In view of the shortcomings of these prisons and of the fact that the Prisons Department cannot conveniently and economically be organized on a district basis, it has been suggested that they should cease to be used except for the custody, which should be finally recognized as a Police responsibility, of persons awaiting trial and of prisoners undergoing very short sentences, and that the other prisoners, both long and short sentence, now accommodated in the districts should be transferred to the Central Prisons. This would mean that accommodation would have to be found in the latter for some 70 to 100 additional prisoners.

C.—CONCLUSIONS.

7. Excluding the District Prisons, the prison accommodation now available will suffice for a maximum prison population of 448 men (400 at the Central Prison and 48 at Athalassa) and 18 women ; if the additional dormitory is built at Athalassa the former figure will be increased to 472. The accommodation required for male prisoners at the Central Prison and Athalassa in order to put into effect the proposal for restricting the use of the District Prisons explained in the preceding paragraph would be from 470 to 500; this allows nothing for further increases in the prison population such as have occurred during the past two decades. There is no room for further new building within the enclosed area of the present Central Prison and, in any case, it would obviously be unsound to incur the considerable expense of adding to the permanent accommodation there if any real prospect exists of removing the whole Prison to a new site within the reasonably near future. The implementation of the proposal in regard to the District Prisons is thus to some extent bound up with the question of the removal of the Central Prison to which reference is made in paragraph 3 above. It is considered that, in present circumstances, the decision on that question must be against removal ; the disadvantages of the present situation of the Prison are obvious and fully admitted, but they are certainly not such as to require immediate remedy regardless of the expense involved. Having regard to the claims of other services on the limited funds available for development purposes, expenditure of the order indicated in paragraph 4 above for the removal of the Central Prison could not be justified. It is therefore proposed that for the next ten years the question of removing the Prison to a new site should be left in abeyance and that no provision for this purpose should be made in the development programme. Towards the end of the decennium, however, it may be desirable to reconsider the financial aspect of the matter in the light of the building costs and land values then obtaining.

8. This does not necessarily imply complete abandonment of the proposal, the adoption of which is obviously highly desirable, for restricting the use of the District Prisons. Even with the accommodation at present available it should be possible to make some progress in this direction and when the third dormitory is available at Athalassa it would appear that there will be just sufficient accommodation to permit putting the proposal into effect in the case of the antiquated prisons at Famagusta, Larnaca and Limassol, leaving the better equipped and more modern prison at Paphos still in operation.

9. If action is taken as proposed above, expenditure will be required for erecting the third dormitory at Athalassa and for rounding off a programme (prepared by the Director of Public Works in 1939 and, since then, put into effect year by year as funds have permitted) of necessary minor improvements and alterations in the Central Prison. These works are of a routine nature and do not constitute a charge on development funds. The provision required in the development programme in respect of Prisons is therefore *nil.*

CHAPTER XIV.

MISCELLANEOUS.

A.—MUNICIPALITIES.

1. The rural municipalities will benefit as villages from the schemes for village improvement (streets, domestic water supplies, public buildings, etc.) outlined in Chapters IX and X above and, apart from giving them priority treatment in the execution of those schemes, it is not considered that any discrimination between them and other villages is necessary or desirable. There remain the six district towns. The Municipal Councils of these towns have prepared during 1945 lists of municipal development schemes, in more or less detail, covering such matters as the preparation of a town plan, housing, domestic water supply, repair of roads, construction and repair of municipal buildings and improvement of amenities (public gardens, tree planting, recreation facilities, etc.). These towns enjoyed revenue during the past year varying from £9,275 in the case of Kyrenia to £58,358 in the case of Nicosia. In 1945, Government, in return for the surrender by the municipalities of certain anachronistic import tolls the annual value of which was about £21,000, gave up the collection of immovable property tax within the municipal limits of these towns, the total proceeds of which amounted to £44,000 in 1944, and transferred to the Municipal Corporations powers for imposing and collecting rates on property. It is commonly agreed that in all towns there is room for a considerable increase in taxation on property and the Municipal Councils thus have to hand the means for rapidly expanding their revenue in order to finance from their own resources a progressive programme of municipal development. In these circumstances there would not appear to be grounds for any large measure of assistance from the central Government in regard to municipal development schemes: nor would it appear unreasonable for Government to relate such assistance as is given to the degree to which the Municipal Councils shew themselves ready to tax their townsfolk for the purposes of municipal development. In practice, it is considered that if Government assistance is forthcoming in regard to town planning and housing for the poorest urban families, it should be possible for the municipalities themselves, given reasonable loan facilities, to finance the remaining items of their development programmes. Of these the main projects are those relating to domestic water supply and the position in this respect is discussed below, with particular reference to whether the schemes of much-needed improvement which have been proposed can be made to pay for themselves without placing an unduly heavy burden on consumers; the conclusion reached is that they can. In regard to the only other major item in the municipal programmes, namely, repair of roads, it should be borne in mind that during the past year the urban municipalities have already received a considerable amount of assistance from Government for the repair of roads which had deteriorated during the war years owing to heavy military traffic and lack of materials for maintenance.

1. TOWN PLANNING.

2. The first need of every town in Cyprus is the preparation of a proper town plan. Much haphazard and wasteful development has already occurred and more is likely to occur in the near future when building operations recommence on a large scale (with added momentum as a result of the almost complete cessation of building during the war) unless adequate powers and machinery for control are available. At the present time both these are lacking. The existing legislation regarding the construction of buildings and streets permits a fair degree of control to be exercised over the design, construction and layout of particular buildings and groups of buildings and in fact these powers have been used to some purpose in the past; but the wider aspects of town planning are provided for only to the extent of certain simple zoning powers and even these have not in fact been used, largely because the District Commissioners and Municipal Councils, with whom the initiative lies under the existing legislation, have not unnaturally felt that they could not move in this specialised matter without expert advice which has been lacking. During 1945 a comprehensive Town Planning Bill, which follows in the main the form of the legislation on this subject in force in Palestine, was prepared and published. Clearly this measure, which calls for expert administration, cannot be enacted until the services of a qualified town planning adviser can be secured; to do so would merely sweep away such control as already exists without establishing any effective machinery in its place. As yet attempts to recruit a town planning adviser for Cyprus have failed but it is hoped that proposals now before the Secretary of State may result in appointment during the course of 1946 and enable a start to be made with the preparation of outline plans for the main towns. It is proposed that the town planning adviser should work in the Public Works Department utilising the services of that Department's draughtsmen and clerks. He will also be assisted by a junior member of the Department's engineering staff who is now receiving training in England in architecture and town planning. It is hoped that by the end of four years the expert work of planning will have been completed, in so far as the district towns at least are concerned, and that it will then be possible to leave the execution of the schemes and any further planning which may be required to the permanent staff of the Public Works Department. Allowing for the salary of the town planning adviser, travelling and some extra clerical and draughting staff in the Department while the

initial planning is going on, it is proposed to insert as a charge against development funds in respect of town planning an annual provision of £2,000 for a period of four years. Thereafter, the specialised work of preparing schemes having been completed and subordinate planning staff having obtained an insight into town planning methods, it is intended that the Public Works Department should undertake the execution of schemes as part of its normal activities and that any residual expenditure in respect of town planning should be accepted as a recurrent Public Works charge.

3. It is hoped that the town planning adviser will also be able to initiate a programme of village planning such as is being undertaken in Palestine. The preparation of schemes covering all the 647 villages in the Island will obviously have to be spread over a considerable number of years but it is thought that if a few typical village schemes are worked out under the expert direction of the town planning adviser, it should be possible for the Public Works Department, in consultation with the District Commissioners, to carry the work through to completion.

2. HOUSING.

4. In determining the extent to which Government should accept responsibility for housing, it should be borne in mind that in Cyprus it is usual for a family to own the house in which it lives. In part this is the result of the operation of the dowry system, a furnished house being the generally accepted form of marriage portion. A contributory cause is the traditional preference of the Cypriot people for investing their savings in property. In the rural areas, leaving out of account summer visitors and government officials who are stationed in the villages, the number of families living in rented houses is negligible. In the urban areas, the proportion between families living in their own and families living in rented premises varies widely from town to town; in Nicosia (into which there has been a great influx of labourers with their families during the war) probably about one half of the population now live in rented houses; in the other towns owner-occupiers predominate (in Paphos and Kyrenia to the virtual exclusion of tenant families). A probable figure (accurate information is not obtainable until the next census is held) for the total number of urban families living in rented houses would appear to be about 6,000, including families who possess houses of their own but prefer to occupy rented premises.

5. While it must be recognised that the standards of housing in the villages and in the poorer quarters of the towns in Cyprus are low and that, as a long term policy, Government should seek by whatever means may be available to raise those standards generally throughout the Colony, it would clearly be impracticable for Government with its present resources to attempt to provide assistance towards the rehousing of more than a small proportion of the families whose present accommodation falls short of any minimum standard which could properly be adopted by Government for the purpose of a general housing policy. The most modest requirements in regard to structure, accommodation, sanitation and ventilation would condemn most village and many urban houses; yet, if due weight is given to the favourable climate and the open-air life which the poorer sections of the community lead, it cannot reasonably be maintained that the effect of present housing conditions on the health of the people of the Colony is so harmful and the consequent need for rehousing so urgent as to justify Government's undertaking any general liability in this respect, at least so long as its resources remain at their present level and the claims of other more urgent developments go unsatisfied. This is not to deny the urgency of the need for improvement in certain aspects of the housing conditions in both the villages and the towns, e.g. sanitation and water supply; but those problems can be tackled independently and are in fact given consideration elsewhere in this Report.

6. There is, however, one section of the community whose rehousing constitutes a special, urgent problem towards the solution of which Government should, it is thought, contribute. This is the class of urban householder, who, not possessing his own house, is too poor to be able to afford an economic rent for the accommodation of himself and his family. Such households at present find what accommodation they can in khans and tenement houses where congestion and imperfect sanitation result in living conditions far worse than the rude squalor of even the most backward villages. The number of such families varies widely from town to town; in Kyrenia and Paphos the problem scarcely exists; in Nicosia, and to a considerably less extent in Limassol, Famagusta and Larnaca, it is serious and relief is urgently required. Congestion is particularly bad in the capital; all towns are suffering from the complete cessation of residential building during the war but in the case of Nicosia the housing shortage has been aggravated by a large war-time influx of labour attracted by military works undertaken in the vicinity. Many of these labourers have now become permanently urbanised and it is among them and their families that the worst cases of overcrowding and unhealthy living conditions are to be found.

7. The need for providing better housing for the working classes in Nicosia and, less urgently, in the other main towns was the subject of recommendations in the Report of the Wages Commission (appointed in 1944 to report on questions of wages and conditions of employment in relation to the cost of living) and it was in pursuance of these recommendations that a housing scheme (D.474) was undertaken in 1945 with

a grant of £15,000 under the Colonial Development and Welfare Act. This scheme provides for the erection of 103 houses in one of the Nicosia suburban villages. Each house consists of a living room, kitchen and two bedrooms and is intended to provide accommodation for a family of five persons. On the grounds that this would produce quicker results and in accordance with the recommendation of the Wages Commission, construction was entrusted to private building enterprise. The grant was applied as a subsidy per house to offset the high cost of building and in return for the subsidy the builder undertook to let the house for a period of three years to a tenant selected by a housing allocation committee (representative of Government, the Nicosia municipality and the local trade unions) at a rent of not more than £1 per month. The scheme is now reaching completion and most of the houses are occupied.

8. It is considered that any further housing schemes which may be undertaken to relieve congestion in the towns should be regarded as primarily the responsibility of the Municipal Corporations, any assistance from Government taking the form of a cash subsidy per house payable to the municipality. It is suggested that the maximum subsidy should be at the rate of £100 per house or one-quarter of the total cost, whichever is less, that the grant of subsidy should be conditional upon Government approval of the plans, that the houses should remain in perpetuity the property of the Municipality and that the allocation of the houses and the rental to be paid by tenants should be decided by the Municipal Council for the time being in office. Any houses erected under this arrangement will thus remain permanently at the disposal of the Municipal Corporation to be allocated from time to time to the most deserving cases among its poor townsfolk. The benefit of subsidy from public funds, whether Government or municipal, will not be conferred on any single family in perpetuity. At the present time it should be possible to build a house providing similar accommodation to those erected under the Scheme D 474 for from £500 to £550 inclusive of the site ; the original estimate for houses erected under the Scheme was in fact £510 inclusive of the site but the houses have actually cost considerably more than this, largely because the builders, since the houses are to become their own property after the period of controlled tenancy expires, have preferred to build in more expensive materials than those specified. On the basis of an all-in cost of £550 and a Government subsidy of £100 per house, it is estimated that the outright subsidy required from municipal funds will vary from £70 to £120 per house according to the life allowed for the buildings (40 to 50 years) and the rental to be collected (at the present time from £1 to 25s. per month would be the maximum).

9. Without a detailed investigation, such as it has not as yet been practicable to undertake, it is not possible to prescribe an exact figure for the number of families for whose housing Government should, applying the criterion suggested in paragraph 6 above, undertake a share of responsibility. But there are several useful pointers on which a fairly reliable estimate may be based. In the first place, the fact that the total number of urban tenant families is comparatively small (*vide* paragraph 4 above) suggests that the number of those families who cannot afford to pay an economic rent is likely to be a matter of hundreds rather than thousands. Secondly, a survey of housing requirements undertaken by District Commissioners in 1944 indicated that the total number of new, urban, working class houses required over the next five years would be about 1,700 of which some 400 were required urgently ; this estimate included houses built for owner occupation and covered the requirements of all working class families and not merely those who could not afford to pay an economic rent. Finally, the committee appointed to allocate the 103 houses erected under the Scheme D 474, in response to an invitation published in the press, received in the twenty-five days during which the invitation stood open, a total of 365 applications, all of which were closely investigated and proved, with a very few exceptions, to be genuine, *i.e.* from householders in real need of assistance ; a further 150 applications were received out of time and were not investigated. These are rough indications only but they suggest that it would be reasonable, accepting the criterion proposed, to limit Government's housing liability to assisting in the erection of 350 to 450 houses in Nicosia (including those built under the existing Scheme) and of 150 to 200 elsewhere. For the rest, owing to the lack of accurate data resulting from the omission of the 1941 census, Government can only proceed empirically in this matter.

10. It is proposed that the grant of a Government subsidy, as outlined in paragraph 8 above, should be offered to the Municipal Corporations in respect of a total of 400 new houses of which 290 should be constructed during the two years 1946–47 and 1947–48 and the remainder, if required, in 1948–49. Provision of £40,000 for this purpose will be necessary. A close watch should be kept throughout the execution of the Scheme on the number and type of applications being received in order to ensure that Government assistance in regard to housing will not be extended beyond the limits suggested above. If at any time it appears that the demand from householders who are genuinely unable to afford an economic rent is falling off or if additional and more accurate data become available (e.g. as a result of the census which is to be held in 1946–47), the proposals above will require re-examination."

3. TOWN WATER SUPPLIES.

11. A full account of the town water supplies is available in paragraphs 96 to 110 of the General Report on Water Supplies in Cyprus prepared by the Water Engineer, of which a revised edition was published in 1945. Briefly the position is as follows:—

(*a*) *Nicosia.*

The main supply, which serves three suburban villages in addition to the town of Nicosia, is administered by a public body known as the Nicosia Water Commission but there are in addition five private water companies; in places where no mains have been laid, supplies are obtained from wells in yards and gardens. The main sources of supply are chains of wells; the condition of these has been much improved during recent years but there is still danger of pollution. These sources together give a minimum average daily supply per head of population of 20 gallons; towards the end of the summer, the flow from the various sources diminishes to such an extent that the supply to the houses has to be shut off during certain hours daily. It is generally admitted that the present water supply of the capital of the Colony cannot be regarded as satisfactory and that the provision of a new supply, adequate in quantity and properly protected against pollution, is an urgent necessity. In 1939 a plan was prepared and submitted to the Consulting Engineers but no progress has been possible owing to the war and, in particular, to the lack of pipes; this scheme which aimed primarily at improving the quality of the supply but which would also have increased the quantity to about 30 gallons per day per head of population, has been kept under constant review and has been amended from time to time during the past six years as new sub-surface supplies have been discovered in the vicinity of the town. Before the war, it was estimated that the total cost of the scheme would be £85,000; at the present time it would be about £200,000.

(*b*) *Larnaca.*

As in the case of Nicosia, Larnaca obtains its supply from a chain of wells, approximately two miles in length, which was constructed in 1745; from the outlet of the wells the water was conducted to the town in masonry aqueducts over 3½ miles in length. In course of time the system fell into a serious state of disrepair and in 1939 the replacement of the aqueduct and of the distribution system in the town by asbestos-cement pipes was undertaken by the Water Supply and Irrigation Department with funds provided by a loan from the Government to the Evcaf Department in arrangement with the Larnaca Municipality. The cost was £24,000 and the scheme is financed entirely from the proceeds of the water rate payable by the townspeople of Larnaca. The scheme was completed in 1941 and Larnaca now has the finest water supply of any municipality in the Island. The minimum output from the wells gives an average of 80 gallons per head of the population of the town per day, and the supply will be adequate in quantity for any probable expansion of the town's population.

(*c*) *Limassol.*

The supply of Limassol town is derived from a spring with a storage tank and from two chains of wells. In the summer months the flow diminishes considerably and the average amount of water available per head of population is not more than 15 gallons. The need for a new supply, satisfactory in quantity and quality, is real and only less urgent than in the case of Nicosia. A scheme has recently been prepared by the Municipal Engineer in consultation with the Water Supply and Irrigation Department which is estimated to cost about £180,000; it is intended to utilise springs lying well outside the town to the north-west conducting the water into the town by gravity.

(*d*) *Famagusta.*

In Famagusta the water supply has been developed in a haphazard way by small schemes serving different parts of the town and now depends on four different sources, a spring, a pair of adjacent boreholes, and two wells; the first is situated some ten miles away from the town and the water is brought in by an ancient masonry aqueduct in which a large part of the supply is lost, particularly during the summer months; the remaining supplies are situated within the built-up area of the town. The first supply could be improved by substituting pipes for the aqueduct; this is a costly project on account of the great length involved and at the present time would require not less than £25,000. In the case of the other sources, little improvement is possible. The proper course to follow would appear to be to do away with the several supplies at present in use and to provide new water from outside the built-up area. Suitable sources have already been prospected.

(*e*) *Paphos.*

This town draws its supplies from two springs, which are piped into the town, and from a chain of wells. The flow diminishes during the summer and the supply to houses is irregular owing to a defective distribution system which could be remedied at no great cost. The minimum daily flow of these two sources gives an average supply of over 15 gallons per day per head of population. The chain of wells is difficult to protect from pollution and should be abandoned as soon as additional supplies become available. For the time being, however, it cannot be represented that there is any urgency in regard to the improvement of the Paphos water supply comparable with that in the case of Nicosia and Limassol.

(f) *Kyrenia.*

Until recently Kyrenia drew its supply from a spring, and from three chains of wells which are situated within the town and surrounded by buildings and as such are liable to pollution. These sources give a minimum daily supply allowing an average of 38 gallons per day per head of the population. Considerable prospecting has been done to locate a new source of water for Kyrenia, and an artesian borehole, recently drilled in the mountain pass through which the main road to Nicosia is laid, will provide an ample supply, adequate to the needs of this town for many years to come. Works have already been undertaken to convey part of this water to the town. The cost of utilising this new supply is being borne entirely by the townspeople.

12. It should not be beyond the ability of the municipalities to finance from their own resources such improvement of their present water supplies as is required. The major schemes are those for Nicosia and Limassol towns; in each case it would be reasonable to finance an undertaking of this nature by raising a loan with a life of forty years. At 3% interest the annual instalment on such a loan (interest and repayment of capital) would be £8,650 in the case of Nicosia, whose scheme will cost £200,000, and £7,785 in the case of Limassol, whose scheme will cost £180,000. To these annual charges must be added the cost of maintenance and renewals. In Nicosia, this will be high since considerable pumping is involved; before the war it was estimated that the annual charges for maintenance and renewals would be from £4,200 to £4,500 a year; at the present time this estimate should be doubled. It would therefore appear that the total annual charge for the scheme will be from £17,000 to £18,000. The scheme will serve some 7,000 families so that in order to cover the annual charges a water rate of roughly £2 10s. per house per annum would be required. By comparison with the rates now being charged by the private water companies in Nicosia, such a rate would not appear to exceed what consumers are able and willing to pay, particularly when the greater convenience (unlike the present supplies, water will be delivered into tanks at the top of consumers' houses) and the far better quality of the new supply are taken into account. In the case of Limassol, the cost of maintenance and renewals will be far less since supply will be by gravity and no pumping will be involved. It is thought that the total annual charge, including repayment of the loan and such maintenance as is required, will be not more than £9,000. The number of families in Limassol is about 4,100; these will all benefit from the new supply, so that an annual rate of £2 4s. per house per annum should suffice. If the townspeople of Nicosia and Limassol are thus able themselves to finance the improvement of their water supplies, there will be no reason for granting any special assistance to the remaining towns (Famagusta and Paphos) where the need for improvement is less acute and the solution less expensive.

4. OTHER MUNICIPAL DEVELOPMENTS.

13. It is also considered that it should not be beyond the means of the Municipal Councils to finance their remaining development projects, such as the improvement of the roads within their municipal limits and the layout of public gardens. There is, however, one exception for which some measure of Government assistance might prove to be necessary. This is the need for constructing an adequate main drainage system in Nicosia. Although this project must wait on provision of a proper water supply, it is none the less an urgent matter which should receive early attention. No up-to-date scheme is available and the preparation of a scheme would appear to be a matter in which the assistance of the Consulting Engineers should be sought. If any Government assistance is to be given, it is suggested that this should take the form of underwriting any loss on the scheme during the initial years of its operation and should be conditional upon the imposition by the municipality of a suitable drainage rate per house. In the absence of a detailed scheme and estimate it is not possible to make any provision for this purpose at this stage but it is proposed that a sum of £1,500 should be provided, to meet the cost of a detailed survey by the Consulting Engineers to be undertaken in 1948–49. The system of main drainage in the other towns is also not entirely satisfactory but, since these are all situated by the sea, the remedy is not likely to be nearly so expensive as in the case of the capital; it is not considered that assistance from Government towards meeting the cost of drainage schemes in those towns would be called for.

B.—ELECTRICITY SUPPLY.

14. The present electricity supply arrangements in Cyprus are inefficient, unreliable and expensive and do not cover more than a small part of the Island; electricity is not available in the rural areas. At present the principal towns and the mining companies each operate their own plant; their installations are mostly of a different type, system and voltage, so that apparatus for use in one area can seldom be used in the other areas—a considerable disadvantage and cause of inefficiency and expense. Since the output is generally small, the overhead costs are extremely high. The largest urban electricity undertaking, although not fully efficient, could with an increase of 10% in its overhead charges operate a plant of at least five times its present capacity; in the smaller undertakings with a similar increase in overhead charges, plant of ten times or more the present capacity could be operated.

15. It has been suggested that the remedy for the present unsatisfactory state of electricity supply in the Island lies in the installation of a single power station sited near the centre of the load and convenient to a port, with a transmission network to supply all areas. A modern power station would be able to supply electricity in bulk to the existing undertakings, at a price less than their own present production costs; it would also be able to supply power to rural areas for pumping and minor industrial use at a lower charge than the running costs of the small engines now being used. A plentiful supply of cheap power would go far towards making financially possible the major pumping schemes to which reference is made in paragraphs 17 to 19 of Chapter III. The provision of cheap electric power to the rural areas would also be of benefit from the point of view of land utilization since it would relieve the drain on the forests, particularly those of the northern range, for wood fuel and charcoal.

16. Examination of this proposal calls for an expert investigation into the consumption, both present and potential, the optimum capacity and the costs of such an installation in Cyprus. In August, 1945, the Secretary of State arranged for the Chief Electrical Engineer of the Government of Nigeria to visit Cyprus and to carry out such a survey. His report is, at the time of writing, under examination by the Consulting Engineers and it is not therefore possible at this stage to include any definite proposals or recommendations in this report.

17. Clearly this project will raise the question of principle whether it would be preferable for a public utility of this kind to be operated by Government itself or by private enterprise. There are obvious advantages on both sides, with the balance inclining, largely for financial reasons, towards operation by private enterprise subject to the interest of development in other directions, in so far as they are dependent on electric supply, being ensured. A decision on this question of principle, however, must wait on the submission of the Consulting Engineers' report.

C.—BROADCASTING.

18. At various times in the past, proposals have been made for establishing a broadcasting station in Cyprus. Some of these have been confined to consideration of an internal service and of the advantage to the Island of having a system for disseminating of local news, educational matter, and entertainment; others have envisaged the possibility of establishing in Cyprus a high-powered station which would serve British interests throughout the Middle East. None of these proposals has resulted in anything more than preliminary investigations. One point emerges from such consideration as has been given locally to these various proposals, namely, that it is unlikely that the Government of the Colony would be in a position to operate efficiently a full-scale broadcasting service; some measure of control by Government would certainly be required but it should not, it is thought, prove impossible to ensure that the service should be available for necessary Government use, without going the length of direct operation by Government. If this point is admitted, it would appear that the installation of a broadcasting service in Cyprus must wait on the initiative of some commercial concern or on the establishment of an Imperial system of broadcasting in which Cyprus would be included.

D.—CIVIL AVIATION.

19. The Island is situated in a commanding position from the point of view of air communications and it may not be unduly visionary to look forward to its becoming in time the focus of a network linking Cairo, Lydda, Beirut, Damascus, Ankara, Rhodes, Istanbul and Athens. Even though the Island may not lie on the direct line of one of the main trunk routes, it may none the less develop into a station of first importance to local air communications within the Eastern Mediterranean region.

20. There is little in the present civil aviation installations in the Island to suggest its potential importance. There is one properly equipped military airfield in the Island, that known as the Nicosia main aerodrome, which, although in use before the war as a summer landing ground for civil aircraft, was at that time undeveloped and which owes its present 1,900 yd. all-weather runways, signals facilities and administrative buildings to the fact of its having been used for Royal Air Force operations during the war. By agreement between the Government (the owners of the land) and the Royal Air Force authorities, this airfield is now used as the main civil airport. There are seven other landing grounds in the Island, of which all but one were constructed during the war for operational use; the exception, that of Larnaca, was in use before the war as the principal civil airport of the Island; it has no proper facilities for signals or passenger traffic.

21. There are at present three civil airlines providing communication with the mainland. These are the British Overseas Airways Corporation which provides a service between Cairo, Nicosia and Ankara, the Middle East Airlines, a Lebanese company, which provides a service between Nicosia and Beirut and thence to Damascus or Lydda, and the Misr Airline of Egypt, which provides a service between Cairo, Nicosia, Beirut and Lydda.

22. It is considered that, so long as civilian air traffic calling at Nicosia remains at its present level and assuming the continuance of the arrangement for the use of the Nicosia aerodrome as a common military and civil airport, the establishment of a separate airport solely for civil purposes would not be justified and the Government should, therefore, for the time being concentrate its attention on improving the routine for customs and immigration formalities and on providing adequate facilities for passenger accommodation at the Nicosia airport. The possibility, however, that it will sooner or later be necessary for Government to provide a separate civil airport cannot be excluded and it is largely for this reason that the Government has recently sought the assistance of the Government of Palestine whose Director of Civil Aviation has visited Cyprus and provided an expert, though necessarily provisional, opinion as to the arrangements which should be made to meet any considerable expansion of civil air traffic. For the time being, it is not possible to do more than record the potential importance of developments in civil aviation in the Colony and the possibility that in the future considerable expenditure of development funds for this purpose may be necessary.

E.—SEA COMMUNICATIONS.

23. Before the war the Island depended for the carrying of its freight and passenger traffic principally on steamers of the Khedivial Mail Line, the Lloyd Triestino, the Messageries Maritimes and various small Greek lines. Since 1937, cargo steamers of the Prince, Moss and Ellerman Lines also began calling at fortnightly intervals at Cyprus but they were usually small freighters with very limited passenger accommodation. A perennial complaint from the commercial community of the Island has been the failure of the British Administration to provide frequent, regular communication by a British steamship line between Cyprus and ports in the United Kingdom and elsewhere in northern Europe. In considering the justice of this complaint, it should be remembered that apart from oranges, the traffic in which is seasonal only and not of any very considerable volume, there is no steady flow of exports to the United Kingdom (carobs go in driblets in small tramps and minerals are usually carried in specially chartered vessels) which any regular line could carry, and further that the volume of the import trade from the United Kingdom is comparatively small. For these reasons it is doubtful whether any more regular service than that provided before the war between the United Kingdom and Cyprus would be a reasonable, economic proposition; nor would there appear to be justification for payment of a subsidy—doubtless very considerable—by Government in order to make it worth while for a British steamship line to establish such a service.

24. Of far greater importance to the general economy of the Island is the provision of adequate communications by sea between Cyprus and the neighbouring ports of the Levant and in this sphere action to secure for the commercial community the benefit of a regular, fast steamer service may more reasonably be demanded of the Government. In fact, a degree of responsibility in this matter has already been accepted by the Island Government which has year by year, since 1899 paid considerable subsidies to various shipping lines to induce them to maintain regular sailings. Thus, before the war, the Khedivial Mail Line, in return for a subsidy at the rate of £7,700 per annum maintained a regular weekly service between Cyprus and Egypt employing a vessel of about 1,100 tons with accommodation for 90 first-class and 36 third-class passengers. During the summer, when the visitor traffic was at its peak, other vessels of the Khedivial Mail Line were added to the service; even so the passenger accommodation was not always sufficient.

25. During the years 1899 to 1939 the Cyprus Government paid out by way of subsidies to foreign steamship lines operating between Cyprus, Palestine and Egypt roughly £225,000. It is for question whether the services so rendered to the Colony have represented a fair return for this outlay and the magnitude of the expenditure, together with the failure of the subsidised lines to provide more than moderate service, prompts speculation as to alternative means of satisfying the Island's need for rapid, regular sea communication with the mainland. The heroic remedy, which has no lack of advocates, is for the Government, either directly or through an officially sponsored company registered in Cyprus, to purchase and operate a vessel which would run to a fixed schedule between Port Said, Haifa and Cyprus without regard to the number of passengers or the amount of freight offering for each journey. Any such scheme must obviously be considered in relation to the value of that part of the Colony's external trade which is likely to be carried in the future by sea between Cyprus and those neighbouring countries, namely, Syria, Palestine and Egypt which would be included in the itinerary of a fast steamer based on Cyprus. The pre-war passenger traffic to and from Cyprus, about 12,000 persons yearly each way, was almost entirely carried in vessels operating in the Levant; this was still the case in 1945 (the first year since 1939 that passenger traffic has assumed considerable proportions) but, for the future, allowance must clearly be made for a large part of the Colony's passenger traffic to be carried by air. As for goods traffic, the total value of the Colony's retained civil imports was roughly £2.25 millions in 1938, that of its domestic exports £2.4 millions; Syria, Palestine and Egypt supplied about £109,000 of the imports and took about £213,000 of the exports. In 1945, when the total value of imports had risen to £5.1 millions and exports to £3.3 millions, these three countries supplied

£1,370,000 of the imports and took £1,600,000 of the exports. Vessels trading between the ports of Cyprus, Egypt, Palestine and Syria also carry in addition an unascertained amount of goods in transit to other countries amounting probably to about ten per cent. of the direct trade. The increase in the proportion and value of the Levant trade since 1938 was, of course, the result of abnormal war-time conditions. It is also necessary in considering the case for direct Government intervention in the sphere of sea communications to assess to what extent the competition of private enterprise in the future is likely to provide the remedy for the shortcomings of the Island's present external communications. There are signs that the virtual monopoly of rapid communications between Cyprus, Palestine and Egypt which the Khedivial Mail Line enjoyed during and before the war is now breaking down; the establishment of a new steamship line employing a fast vessel with accommodation for 60 first-class passengers and providing a thrice-weekly service on the route Alexandria—Limassol—Port Said—Limassol has recently been announced; and the airlines operating to Cyprus are now making a bid to secure a substantial share of the visitor traffic. In view of the complexities of the present situation in regard to communications throughout the whole Middle East area, it is not possible at the present juncture to formulate any definite proposals for action by the Cyprus Government in order to secure for the Island improvement in its system of external communications; but the desirability of Government's keeping the closest possible watch on new developments in both sea and air communications is obvious and it is understood that the whole question is in fact already under constant review.

F.—THE GOVERNMENT RAILWAY.

26. The section of the Government Railway from Famagusta to Nicosia, 37 miles in length, was opened in 1905; that from Nicosia to Morphou, 24 miles, in 1907; an extension to serve the mining areas, 15 miles in length, was added in 1910. In 1932, in view of the competition of road transport, it was decided to abandon the sections beyond Nicosia, except for a limited amount of goods traffic as required by the Cyprus Mines Corporation. The total capital expenditure on the Railway up to 1944 was £203,000.

27. The Famagusta–Nicosia section has been in constant use since it was laid down and only spot renewals have been made to keep the line in working order; complete relaying and reballasting of the 37 miles is now necessary. Most of the locomotives are 30 years old and cannot give efficient service, the goods rolling stock has for some years been inadequate, new machine tools, workshops and engine sheds are required. The Superintendent of the Railway has prepared a scheme for remedying all these defects and for enabling the Railway, protected by legislation, to compete with road transport; the cost of this scheme is £128,000. The whole future of the Railway, including the possibility of its final abandonment, is at the time of writing the subject of a special investigation and it is not possible herein to formulate any proposals regarding its development.

G.—STAFF TRAINING PROGRAMME.

28. Provision has been suggested in previous Chapters of this Report for the training overseas of locally-recruited specialist staff in the Agricultural, Forest, Medical and Education Departments. These proposals are in fact merely parts of a comprehensive scheme for training Cypriot staff abroad which has already been prepared and submitted to the Secretary of State and for which he has sanctioned an initial grant of £8,000 under the Colonial Development and Welfare Act for the year 1945–46 (D 509). The estimated expenditure up to 31st March, 1946, is £7,900. The scheme, as originally submitted, provided for the training of staff for six branches of the public service only, namely, the Admistration, the Treasury and Inland Revenue Department, the Agricultural, Medical, Education and Public Works Departments, but a revision of the scheme has recently been undertaken and is now before the Secretary of State, which includes provision for the staff training requirements of the Forest, Antiquities and Land Registration and Surveys Department. The expenditure proposed for the Departments for whose staff training requirements specific provision has not been included in earlier Chapters of this Report is as follows:—

	£
Administration	5,220
P.W.D.	4,920
Treasury	8,000
Antiquities	2,860
Land Registration & Surveys	2,505
Total	£23,505

A reserve of £2,505 has been allowed on the whole scheme against unforeseen expenditure. A sum of £210 has already been spent during 1945–46 in respect of two Treasury scholars and the sum required for the next ten years, including the reserve, is thus £25,800. The provision of £23,505 is in respect of 15 scholars, all men, who are to be trained in England for subsequent appointment in the five departments listed. The standing of the candidates, and the posts which they are to be trained to fill, are given in the statement below :—

No.	*Candidate*	*Prospective Post*	*Years of Training*
3	Ex-serviceman or member of clerical or administrative staff.	Administrative Cadet	4
3	Technical Assistant in P.W.D. or ex-serviceman, or secondary school boy.	Assistant Engineer	4
4	Ex-serviceman or secondary school boy	Accountant or Income Tax Assessor.	5
2	Student Assistant, Cyprus Museum	Assistant Curator, Cyprus Museum.	3
2	Member of clerical or survey staff	Superintendent of Land Registration.	3
1	Member of clerical or survey staff	Superintendent of Surveys	1

In all but the last case the London Matriculation or similar examination will be regarded as the minimum qualification for candidates.

29. Provision has been made in the relative Chapters above for the extra staff which will be temporarily required in the Agricultural, Forest, Medical, and Education Departments to replace staff under training. As for the other departments the depletion of staff caused by the training scheme will not be such as to require temporary replacements. The scheme is designed for the dual purpose of providing trained staff for the expansion of Government activities which the development programme will involve and of enabling locally-recruited officers to fit themselves for promotion to posts of higher responsibility in the public service. In consideration of the latter object, it is hoped that some part of the cost of the scheme may be accepted as a charge against the centrally administered scholarship scheme which the Secretary of State has under consideration for the Colonial Empire as a whole.

H.—DEPARTMENT OF TRADE AND INDUSTRY.

30. Although, apart from the mining of pyrites, asbestos and chrome the development of which is already being fully explored by the mining concerns long established in Cyprus, it is probably true to say that the Island does not present a promising field for major industrial development, there is a wide range of small industries in the Colony mainly dependent on locally produced raw materials the development of which merits the closest study by Government. Such are the local textile industry which, if rationalised, could supply a large part of the needs of the Island's internal markets together with certain special lines for export, the processing of surpluses of fruit and vegetables, the production of pigments and paints, and the mining of gypsum and manufacture of plaster and plaster products for export. Apart from the development and rationalisation of such relatively small industrial enterprises, there is an urgent need for better organisation of the Colony's export trade particularly in regard to the marketing of agricultural products overseas. To some extent this need has been met during recent years by the war-time departments dealing with supply, transport and marketing. It now seems probable that the time has come for the creation of a permanent Trade and Industry Department which would be responsible for advising Government upon its trade policy, including such matters as tariffs, concessions, subsidies, quotas and protective legislation, and for the implementation of that policy when once determined. It would be the business of the Department to prospect the possibilities of trade development both internal and external and its principal officer would be empowered himself to engage in trade or industry on behalf of Government where private interests were unable or unwilling to do so, or to participate with private interests in such trade or industry or to provide capital for private industry which it may be desired to encourage. For the latter part of the Department's responsibilities it might well be desirable to create an Investment Corporation with funds provided either wholly by Government or by Government and the public with a majority holding by the former. Proposals for the creation of such a Department by a process of evolution out of the war-time Supplies and Marketing organisations are at the present time under examination by the Government and pending the result of that examination it is not possible to make any specific provision for the purpose. But it is desired to stress the very great potential importance of such a project for the whole economy of the Island and thus indirectly for development in other directions ; indeed the benefit which might conceivably be derived by all classes of the community from an efficient central organisation charged with the promotion of trade and commerce might well be such as to dwarf into insignificance all but a very few of the proposals put forward in this Report.

I.—SUMMARY.

31. The total cost of the schemes for which specific provision is suggested above for the ten years 1946–56 is £75,300, the items being £8,000 for town planning, £40,000 for housing subsidies, £1,500 for a main drainage survey in Nicosia and £25,800 for the staff training programme. Details are given in the Appendix which follows.

MISCELLANEOUS.

APPENDIX.

Expenditure proposed on schemes included in the programme.

A.—BY YEARS.

Year	Town Planning				
	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
	£	£	£	£	£
1946–47 ..	—	2,000	2,000	—	2,000
1947–48 ..	—	2,000	2,000	—	2,000
1948–49 ..	—	2,000	2,000	—	2,000
1949–50 ..	—	2,000	2,000	—	2,000
1950–51 ..	—	—	—	—	—
1951–52 ..	—	—	—	—	—
1952–53 ..	—	—	—	—	—
1953–54 ..	—	—	—	—	—
1954–55 ..	—	—	—	—	—
1955–56 ..	—	—	—	—	—
Total 1946–56 ..	—	8,000	8,000	—	8,000

Year	Housing Subsidies				
	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
	£	£	£	£	£
1945–46 ..	15,000	—	15,000	—	15,000
1946–47 ..	14,000	—	14,000	—	14,000
1947–48 ..	15,000	—	15,000	—	15,000
1948–49 ..	11,000	—	11,000	—	11,000
1949–50 ..	—	—	—	—	—
1950–51 ..	—	—	—	—	—
1951–52 ..	—	—	—	—	—
1952–53 ..	—	—	—	—	—
1953–54 ..	—	—	—	—	—
1954–55 ..	—	—	—	—	—
1955–56 ..	—	—	—	—	—
Total 1946–56 ..	40,000	—	40,000	—	40,000

A.—BY YEARS—*continued.*

Year	Nicosia Drainage Survey				
	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
	£	£	£	£	£
1946–47 ..	—	—	—	—	—
1947–48 ..	—	—	—	—	—
1948–49 ..	1,500	—	1,500	—	1,500
1949–50 ..	—	—	—	—	—
1950–51 ..	—	—	—	—	—
1951–52 ..	—	—	—	—	—
1952–53 ..	—	—	—	—	—
1953–54 ..	—	—	—	—	—
1954–55 ..	—	—	—	—	—
1955–56 ..	[illegible]	—	—	—	—
Total 1946–56 ..	1,500	—	1,500	—	1,500

Year	Staff Training Programme				
	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
	£	£	£	£	£
1945–46 ..	210	—	210	—	210
1946–47 ..	3,497	—	3,497	—	3,497
1947–48 ..	3,095	—	3,095	—	3,095
1948–49 ..	4,240	—	4,240	—	4,240
1949–50 ..	4,245	—	4,245	—	4,245
1950–51 ..	3,720	—	3,720	—	3,720
1951–52 ..	1,458	—	1,458	—	1,458
1952–53 ..	1,285	—	1,285	—	1,285
1953–54 ..	980	—	980	—	980
1954–55 ..	570	—	570	—	570
1955–56 ..	205	—	205	—	205
Reserve ..	2,505	—	2,505	—	2,505
Total 1946–56 ..	25,800	—	25,800	—	25,800

Summary.

Year	Capital	Recurring	Total	*Less* Receipts	Net Total
	£	£	£	£	£
1946–47 ..	17,497	2,000	19,497	—	19,497
1947–48 ..	18,095	2,000	20,095	—	20,095
1948–49 ..	16,740	2,000	18,740	—	18,740
1949–50 ..	4,245	2,000	6,245	—	6,245
1950–51 ..	3,720	—	3,720	—	3,720
1951–52 ..	1,458	—	1,458	—	1,458
1952–53 ..	1,285	—	1,285	—	1,285
1953–54 ..	980	—	980	—	980
1954–55 ..	570	—	570	—	570
1955–56 ..	2,710	—	2,710	—	2,710
Total 1946–56 ..	67,300	8,000	75,300	—	75,300

B.—BY SCHEMES.

Serial No.	Scheme	Paragraph of Chapter	Capital	Recurring	Total	*Less* Savings or Receipts	Net Total
			£	£	£	£	£
1	Town Planning	2–3	—	8,000	8,000	—	8,000
2	Housing Subsidies ..	8–10	40,000	—	40,000	—	40,000
3	Nicosia Drainage Survey	13	1,500	—	1,500	—	1,500
4	Staff Training	28	25,800	—	25,800	—	25,800
	Total	.. ..	67,300	8,000	75,300	—	75,300

CHAPTER XV.

CONCLUSION.

A.—THE COST OF THE PROGRAMME.

1. The sum required to finance the programme described in this Report is £5,787,950, divided as follows among the departments and services concerned :—

	£		£
		Brought forward	4,528,700
Agriculture	553,100	Co-operation	20,000
Irrigation	917,800	Roads	412,000
Forests	880,200	Village Development	490,250
Medical	913,600	Harbours	83,500
Education	940,000	Holiday Resorts	178,200
Anti-malarial work	324,000	Miscellaneous	75,300
Carried forward	£4,528,700	Total	£5,787,950

Many of these works would otherwise have been included in the annual provision under " Public Works Extraordinary " during the decennium. It is probably not too much to assume that £100,000 a year, or £1 million during the ten year period would have been provided in the estimates for capital works now forming part of the development programme.

2. To this estimate must be added the amounts by which expenditure on certain schemes for whose operation during the year 1945–46 provision is included in the Report has fallen short as at 31st March, 1946, of that estimated (e.g. paragraph 46 of Chapter VI assumes that £35,000 would be spent during 1945–46 on the Reform School at Lapithos ; in fact the grant sought under the Colonial Development and Welfare Act has not yet been approved and no expenditure has been incurred). These amounts, which must be carried over to the period 1946–56, are as follows :—

	£
Agriculture	18,000
Irrigation	16,000
Medical	24,500
Education	62,400
Anti-Malarial Work	30,000
Village Development	6,100
Miscellaneous : Housing Subsidies	7,100
Total carry over	164,100

The particular items and amounts underspent are shewn in the Appendix to this Chapter.

3. The total cost of the programme is thus increased to £5,952,050. This amount is distributed as follows over the years of the decennium :—

Year —		Capital £		Recurring *less* Receipts £		Total £
1946–47	.. ..	1,028,693	..	357,954	..	1,386,647
1947–48	.. ..	872,123	..	126,872	..	998,995
1948–49	.. ..	575,460	..	82,430	..	657,890
1949–50	.. ..	497,257	..	90,488	..	587,745
1950–51	.. ..	533,878	..	75,642	..	609,520
1951–52	.. ..	272,958	..	144,810	..	417,768
1952–53	.. ..	184,985	..	149,310	..	334,295
1953–54	.. ..	187,680	..	153,010	..	340,690
1954–55	.. ..	156,270	..	153,710	..	309,980
1955–56	.. ..	153,410	..	155,110	..	308,520
Total	..	4,462,714	..	1,489,336	..	5,952,050

B.—THE SOURCES OF FINANCE.

4. The sources of finance available for the implementation of the Colony's development programme are (1) grants or loans under the Colonial Development and Welfare Act, (2) the proceeds of loans, raised locally for development purposes, and (3) such sums as can be set aside during the ten-year period from future revenue sources having regard to possible increases of revenue during the same period from development or increased taxation.

5. The allocation to Cyprus of the funds available under the Colonial Development and Welfare Act, 1945, is £1,750,000. It is to the advantage of the Colony to utilize this allocation in the form of free grants rather than loans and there are more than enough schemes included in the programme which would be suitable for financing by direct grants to exhaust the whole allocation. The commitment carried over at 31st March, 1946, from schemes already approved under the Colonial Development and Welfare Act, 1940, and chargeable to the grants made under that Act is roughly £700,000, so that the amount available from this source for new development is £1,050,000.

6. Cyprus is in an exceptionally strong position in respect of its borrowings. With an annual revenue of over £3 millions its debt, excluding money raised locally and re-lent to His Majesty's Government, is only a little over £1,300,000 costing annually less than £75,000 for interest and sinking fund payments. Moreover a portion of the annual cost is covered by payments from borrowers to whom the money has been re-lent. Having regard to the increased wealth of the Colony, it should, therefore, be possible to finance up to £3 millions of the cost of the programme from loans, inclusive of the unspent balance of the 1945 Development Loan. The annual cost in interest and sinking fund, spread over 25 years should not exceed £180,000, *i.e.* less than 6% of the 1946 estimated revenue. Since the capital works included in the development programme are designed to benefit the public over an extended period, the proposal that their cost should be spread over that period by means of loans and not borne in full by the taxpayers in the years in which the works are undertaken is a just and proper one.

7. The third source of finance for the development programme, namely, the sums which can be set aside during the ten-year period from future revenue sources, is even less susceptible of accurate assessment at the present time. A danger which is inherent in any large development plan the execution of which is confined within a narrow space of years is that it may involve an insupportable burden of permanently recurring expenditure and it clearly behoves Government in accepting recurrent charges on its future revenue resources to adopt a distinctly cautious attitude—more particularly in present uncertain circumstances. An attempt is made below to indicate what portion of the total estimated expenditure on development should be regarded as chargeable to the Colony's annual revenue during the ten years and also what the residual commitment will be on development schemes from 1956 onwards when other sources of development finance may cease to be available. Having regard to the general need for caution in this matter, it is considered that it would be unwise to reckon on funds being available from annual revenue sources for spending on the development programme during the ten years on a scale exceeding 5% of the estimated revenue for 1946, *i.e.* about £1,600,000 in all over the decennium, and that 5% of the present annual revenue should also be regarded as the upper limit for the residual commitment at the end of the development period.

8. On the above basis, the sources available for financing new development in Cyprus during the next ten years are as follows :—

	£	
1. Colonial Development and Welfare funds	1,750,000	(of which £700,000 is already committed).
2. Loan funds	3,000,000	
3. Annual revenue sources	1,600,000	
Total	£6,350,000	

It is emphasized that this is the *total* sum which at the present time can be reckoned on as likely to be available for development. As will be seen, the total thus available is greater by some £400,000 than the total cost of the programme as shewn in paragraphs 1 and 2 above and it would thus be possible, on this showing, for Government to decide at once to implement the whole programme as it stands. Such a course does not, however, commend itself. In the circumstances, to commit unreservedly and at once the whole of the available resources of development finance would be a mistake ; the sound and proper course will be to earmark funds forthwith for the execution of a limited programme based on a selection of the more urgent schemes outlined in this Report and to keep in reserve a substantial portion of the available resources against development commitments as yet unforeseen or unbudgetted for. This course involves assigning degrees of priority between the schemes for which provision is included in the programme ; an attempt at such a priority classification is made in the section which now follows and in the Appendix to this Chapter.

C.—ALLOCATION OF PRIORITY AND FINANCE.

9. All the schemes included in the Report are genuinely necessary to the proper development of the country, for this was the criterion by which their inclusion was judged. The result of subjecting the whole programme to a careful scrutiny, in which full use has been made of the knowledge and judgment of officers with long and varied experience in the administration of the Colony is contained in the Appendix to this Chapter. Explanatory remarks are appended in a number of cases in order to sketch the considerations on which the allocation of priority is based, but obviously these remarks for reasons of space cannot be more than a bare and often oversimplified suggestion of the reasoning behind the classification adopted. Three broad priorities have been applied and the resulting allocation of funds by departments and services is as follows :—

Department or Service	*Priority*			*Total*
—	1st.	2nd.	3rd.	
	£	£	£	£
Agriculture	328,915	91,900	150,285	571,100
Irrigation	770,617	99,883	63,300	933,800
Forests	490,360	232,000	157,840	880,200
Medical	541,822	310,000	86,278	938,100
Education	635,502	145,898	221,000	1,002,400
Anti-malarial Work	354,000	—	—	354,000
Co-operation	20,000	—	—	20,000
Roads	262,000	150,000	—	412,000
Village Development	456,350	40,000	—	496,350
Harbours	79,500	4,000	—	83,500
Holiday Resorts	139,200	39,000	—	178,200
Miscellaneous	82,400	—	—	82,400
Total	£4,160,666	£1,112,681	£678,703	£5,952,050

10. A classification according to the source or sources of finance which are considered appropriate for each scheme is also attempted in the Appendix. Generally speaking the charges entered against Colonial Development and Welfare funds or against loan funds are in respect of capital undertakings or schemes with a definite life determined within the ten-year development period. Recurrent charges of a permanent nature are entered against annual revenue sources. Care has been taken to co-ordinate the priority allocation under the head of annual revenue sources, from which the permanently recurring charges on schemes must sooner or later be met, with the allocations proposed from other sources. The result of the classification by sources and by priorities is in summary (the Appendix provides details scheme by scheme) as follows :—

Source	*Priority*			*Total*
—	1st.	2nd.	3rd.	
	£	£	£	£
1. Colonial Development and Welfare funds	1,392,166	59,800	—	1,451,966
2. Loan funds	1,937,750	819,883	238,000	2,995,633
3. Annual revenue sources	830,750	232,998	440,703	1,504,451
Total	£4,160,666	£1,112,681	£678,703	£5,952,050

D.—RESIDUAL COMMITMENT.

11. The residual commitments from 1956 onwards involving additional recurrent expenditure resulting from the projects described in this programme are estimated as follows :—

Agriculture :	£ *p.a.*
1. Maintenance of Existing Nurseries	1,100
2. Olive Experiment Station	800
3. Deciduous Fruit Sub-stations	1,100
4. Employment of Extension Staff	2,800
5. Purchase of Imported Stud Animals	1,000
6. Poultry Extension Work	800
7. Employment of Agricultural Staff	3,600

	£ *p.a.*
Irrigation :	
8. General Prospecting Work	3,500
Forests :	
9. Afforestation—Mountain Forests (Revenue accruing)	6,000
10. Afforestation—Lowland Forests (Revenue accruing)	6,000
11. Forest Nurseries	1,600
12. Forest Roads	8,000
13. Forest Telephone System	2,000
14. Forest Buildings	2,000
15. Forest School	1,500
16. Staff	10,000
Medical :	
17. Nicosia Hospital and Nurses Home	3,500
18. Limassol Hospital and Nurses Home	200
19. Additional Staff, Kyrenia and Paphos Hospital	300
20. Larnaca Hospital Extension	100
21. Famagusta Hospital	300
22. Kyperounda Sanatorium	1,900
23. Mental Hospital	600
24. Rural Health Units	19,200
25. School Medical Service	6,500
26. Tuberculosis Dispensaries	800
Education :	
27. Teachers' Training College	5,500
28. Women's Training College	9,000
29. Pay of Teachers	20,800
30. Building Grants	10,000
31. Inspectorates	2,300
32. English School	1,200
33. Village High Schools	8,000
34. Pay of Apprentices	5,000
35. Apprentices' Training Centre	2,900
36. Evening Classes	300
37. Agricultural Schools	6,000
38. Probation Service	6,000
39. Headquarters Staff	300
40. Specialist Staff	1,900
Anti-Malarial Work :	
41. Anti-Malarial Work	3,000
Roads :	
42. Difference between maintaining 400 miles of village roads (*a*) as P.W.D. gravel roads, and (*b*) as Commissioners' roads	20,000
Village Development :	
43. Additional staff for village water supplies maintenance	710
44. Additional provision for roadside tree-planting	1,600
Harbours :	
45. Additional maintenance dredging	2,000
Holiday Resorts :	
46. Snow clearance	400
47. Tourist Department	4,000
48. Tourist Publicity	2,000
Miscellaneous :	
49. Employment of Trained Staff	5,500

12. In summary the residual commitment from 1956 onwards is thus as follows :—

	Residual Expenditure £
Agriculture	11,200
Irrigation	3,500
Forests	13,100
Medical	33,400
Education	79,200
Anti-malarial Work	3,000
Roads	20,000
Village Development	2,310
Harbours	2,000
Holiday Resorts	6,100
Miscellaneous	5,500
Total	£179,310 p.a.

If only the first priority schemes are executed within the ten years this will be reduced to £131,410 ; if only the first and second priority to £157,410.

E.—CONCLUSION.

13. Accepting the need for caution to which attention is drawn in paragraph 9 above, it is proposed that in the first instance that part only of the development programme should be undertaken which is represented by the schemes admitted under the first priority. This will involve expenditure as follows :—

	£
1. Colonial Development and Welfare funds	1,392,166
2. Loan funds	1,937,750
3. Annual revenue sources	830,750
Total	£4,160,666

A programme thus limited will involve a residual commitment from 1956 onwards of £131,410 p.a. and will leave in round figures the following reserves from the estimated sources of revenue given in paragraph 9 above :—

	£
1. Colonial Development and Welfare funds	350,000
2. Loan funds	1,000,000
3. Annual revenue sources	770,000
Total	£2,120,000

14. This does not imply abandonment of the schemes classified as of second and third priority but simply postponement of the final decision to put them into execution until a clearer picture can be obtained of the Colony's future revenue prospects.

APPENDIX

Allocation of Priority and Finance.

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CONCLUSION.

APPENDIX.

Allocation of priority and finance for schemes included in the development programme.

A.—BY SCHEMES.

Scheme	Para. of Chap.	Provision shewn for 1945–46 but unspent on 31.3.1946	Total Amount proposed 1946–56	Priority and Suggested Source of Finance								
				Colonial Development & Welfare Funds			Loan Funds			Annual Revenue Sources		
				1st Priority	2nd Priority	3rd Priority	1st Priority	2nd Priority	3rd Priority	1st Priority	2nd Priority	3rd Priority
AGRICULTURE.	Chap. II	£	£	£	£	£	£	£	£	£	£	£
1. Nursery Gardens :												
Maintenance of Existing Gardens ..	9	—	11,000	—	—	—	—	—	—	11,000	—	—
Olive Nurseries ..	10	—	64,500	19,500	—	—	45,000	—	—	—	—	—
2. Olive Experiment Station	11–12	5,600	16,000	—	12,800	—	—	—	—	—	8,800	—
3. Conversion of Vineyards	13	1,000	10,000	1,000	—	—	2,000	3,000	5,000	—	—	—
4. Deciduous Fruit Substations	14–17	1,800	11,000	7,000	—	—	5,800	—	—	—	—	—
5. Tobacco Cultivation ..	18–21	1,200	4,800	6,000	—	—	—	—	—	—	—	—
6. Seed Production ..	22–25	1,500	9,200	—	—	—	10,700	—	—	—	—	—
7. Agricultural Extension Work :—												
Training of Staff ..	28	—	16,000	—	—	—	—	—	—	2,000	6,000	8,000
Employment of Staff	28	—	12,800	—	—	—	—	—	—	1,600	4,800	6,400
Improvement and Protection of Agriculture	29	—	46,500	—	—	—	25,000	—	—	—	—	21,500
Training of Non-officials	29	—	25,000	—	—	—	—	5,000	—	—	—	20,000
Exhibition of Agricultural Machinery ..	30	—	11,000	—	—	—	—	—	—	—	2,500	8,500
8. Sericultural Station ..	40	1,000	800	—	—	—	1,800	—	—	—	—	—
9. Govt. Stock Farm ..	43–45	—	23,000	—	—	—	—	5,000	18,000	—	—	—
10. Larnaca Stud Stable ..	46	—	3,000	—	—	—	—	—	—	3,000	—	—
11. Purchase of Imported Stud Animals	47–48	2,200	9,300	—	—	—	7,000	—	—	4,500	—	—
12. Purchase & Upkeep of Stud Bulls & Donkeys	49	—	6,000	—	—	—	—	—	—	6,000	—	—
13. Import of Non-pedigree Cows	50	—	1,000	—	—	—	—	—	—	—	1,000	—
14. Poultry Extension Work	51–52	3,200	8,700	4,500	—	—	—	—	—	7,400	—	—
15. Fodder Demonstrations	53	—	15,000	—	—	—	6,000	—	—	—	3,000	6,000
16. Soil Conservation ..	58–66	—	200,000	16,000	—	—	100,000	40,000	44,000	—	—	—
17. Training	70–72	500	15,400	15,115	—	—	—	—	—	—	—	785
18. Refresher Courses ..	73	—	14,000	—	—	—	—	—	—	3,000	—	11,000
19. Employment ..	74	—	19,100	—	—	—	—	—	—	18,000	—	1,100
Total		18,000	553,100	69,115	12,800	—	203,300	53,000	67,000	56,500	26,100	83,285

REMARKS.

1\. Important for maintaining supply of trees, etc. to farmers. Now become normal Government activity and whole charge transferred to Annual Revenue.

Capital cost charged to C. D. & W.; initial loss on maintenance charged to Loan Funds. By 1956 self-supporting. Of first importance for economic, land-use and nutritional reasons.

2\. Capital cost charged to C. D. & W.; maintenance to Annual Revenue. Of long-term importance in developing olive cultivation and processing.

3\. When export markets for vine products return to normal, conversion to better varieties may become urgent necessity. Priority allocation therefore tentative only. Revote of £1,000 on D. 101 already approved for 1946–47. Thereafter to be financed from Loan Funds.

4\. C. D. & W. grant of £11,800 approved 1945 of which £4,800 spent up to 31.3.1946, leaving £7,000. Further £5,800 required to be found from Loan Funds. Of first importance as promoting orchard cultivation giving valuable export crops and better land use.

5\. Tobacco at present important but future market uncertain. Expert advice may be deciding factor. Scheme D.515 already approved.

6\. Scheme started 1945 with funds from 1945 Development Loan. If export develops as hoped, should become self-supporting by 1949–50.

7\. Expansion of departmental activities charged to Annual Revenue.

Expansion of departmental activities charged to Annual Revenue.

Normal departmental activity to be stepped up from Loan Funds for intensive propaganda and extension work during next few years while farmers have money for capital improvement of their holdings.

Of great potential importance but as yet experimental. Limited grant from Loan Funds will enable effects to be tested.

May perhaps be left to manufacturers themselves and provision made for this purpose may be saved.

8\. Future of silk industry uncertain but cost of scheme is small and potential value great. Capital cost only charged to C. D. & W. Application already submitted.

9\. Complete modernization desirable but not urgent. Some improvements are more urgent than others and can be undertaken separately; hence provision of £5,000.

10\. A normal departmental project which should be no longer delayed.

11\. A normal departmental charge. Scheme already submitted under C. D. & W. will be withdrawn.

12\. A normal departmental charge.

13\. A normal departmental charge.

14\. Possibility of valuable export trade. Cost of expert from U.K. charged to C. D. & W.

15\. Solution of grazing problem depends to some extent on inducing farmers to grow fodder crops. Demonstrations should be started at once and provision made from loan funds for scheme on limited scale.

16\. Cost of capital equipment charged to C. D. & W. Large-scale soil conservation of first urgency and importance. An economic development which will preserve natural resources and increase prosperity of peasant farmers.

17\. Implementation of many other schemes depends on training staff overseas. Urgent and important. Scholarship scheme already submitted to S. of S. provides £15,115 for agricultural scholars for 1946–56. Balance to Annual Revenue to be undertaken only if funds permit.

18\. Certain courses should be provided within next 2–3 years; remainder can be postponed for time being.

19\. Consequential on item 17. To be charged to Annual Revenue.

A.—By Schemes—*continued.*

Scheme	Para. of Chap.	Provision shewn for 1945–46 but unspent on 31.3.1946	Total amount proposed 1946–56	Priority and Suggested Source of Finance								
				Colonial Development & Welfare Funds			Loan Funds			Annual Revenue Sources		
				1st Priority	2nd Priority	3rd Priority	1st Priority	2nd Priority	3rd Priority	1st Priority	2nd Priority	3rd Priority
Irrigation.	Chap. III	£	£	£	£	£	£	£	£	£	£	£
1. Gravity Irrigation Schemes	6–13	11,500	715,000	540,617	—	—	100,000	85,883	—	—	—	—
2. Subsidized Drilling Scheme..	14–16	—	48,000	8,000	—	—	40,000	—	—	—	—	—
3. Geophysical Unit ..	27	—	14,000	—	14,000	—	—	—	—	—	—	—
4. General Prospecting Work	28	4,500	85,000	—	—	—	—	—	—	70,000	—	19,500
5. Staff	29	—	55,800	12,000	—	—	—	—	—	—	—	43,800
Total		16,000	917,800	560,617	14,000	—	140,000	85,883	—	70,000	—	63,300

Forests.	Chap. IV.	£	£	£	£	£	£	£	£	£	£	£
1. Mountain Forests ..	14–17	—	278,000	94,000	—	—	100,000	84,000	—	—	—	—
2. Lowland Forests ..	18	—	39,000	—	—	—	39,000	—	—	—	—	—
3. Village Fuel Areas ..	19–20	—	100,000	20,500	—	—	39,500	40,000	—	—	—	—
4. Forest Nurseries ..	22	—	20,400	—	—	—	4,400	—	—	16,000	—	—
5. Tree Planting Subsidies	23	—	35,000	—	—	—	—	—	—	—	—	35,000
6. Forest Roads	24–26	—	169,000	—	—	—	60,000	25,000	40,000	20,000	7,000	17,000
7. Forest Telephone System	27–28	—	54,000	—	—	—	—	—	—	30,000	—	24,000
8. Forest Buildings ..	29–30	—	70,800	—	—	—	25,000	20,000	10,000	7,000	6,000	2,800
9. Forest School	31	—	25,000	—	13,000	—	—	—	—	—	12,000	—
10. Scholarships and Training	32	—	15,000	9,960	—	—	—	—	—	—	—	5,040
11. Staff	33–34	—	74,000	—	—	—	—	—	—	25,000	25,000	24,000
Total		—	880,200	124,460	13,000	—	267,900	169,000	50,000	98,000	50,000	107,840

REMARKS.

1. Of absolutely top priority for economic development. Balance of current C. D. & W. schemes, £140,617, *plus* £400,000 new money charged to C. D. & W.; remainder to Loan Funds, a token distribution between 1st and 2nd Priority being indicated.
2. Also of first importance for economic development. Capital cost of new rigs charged to C. D. & W.; recurrent costs during decennium to Loan Funds.
3. Of somewhat less urgency but of considerable long-term importance. May be chargeable to centrally administered schemes for geodetic and topographical research.
4. Essential to the whole irrigation programme that this work should continue. A permanent departmental activity which should be charged to annual Revenue Sources. Some reduction on the estimate may be possible and this is suggested by partial allocation under the 3rd Priority.
5. Provision for two Assistant Irrigation Engineers to be recruited abroad for six years service in Cyprus charged to C. D. & W. since they will be engaged for peak period of C. D. & W. expenditure on gravity irrigation. Now considered that remaining cost of staff may be saved; balance therefore to 3rd Priority and charged to Annual Revenue sources as being a normal departmental charge.

1. Residue of C. D. & W. scheme D. 45 charged to C. D. & W. Remainder to Loan Funds. A token distribution between 1st and 2nd priority being indicated. Importance of scheme lies in preserving natural resources.
2. Charged to Loan Funds. An economic scheme which will more than pay for itself.
3. Balance of C. D. & W. scheme D. 102 charged to C. D. & W.; remainder to Loan Funds. A token distribution between 1st and 2nd priority being indicated. Importance lies in relieving drain for fuel on main forests; also valuable reafforestation in the plains.
4. Importance lies in accelerating tree-planting in marginal lands of plains and foothills. Capital cost to Loan Funds; maintenance to Annual Revenue.
5. Desirable but not urgent. Without direct subvention, much progress can be made in this sphere by means of long-term loan facilities.
6. Capital charged to Loan Funds; maintenance to Annual Revenue. Priority scale down conformably to the remainder of the forest programme.
7. A permanent feature of the departmental machine; cost of extension should be charged to Annual Revenue evenly over the ten years. Priority scale down conformably with the rest of the forest programme.
8. £25,000 charged to 1st priority Loan Funds to enable erection of buildings most urgently required; proportionate maintenance provision under 1st priority Annual Revenue.
9. Capital charged to C. D. & W.; maintenance to Annual Revenue. Capital provision may be chargeable to centrally administered C. D. & W. funds. Now seems possible that scheme may serve other Middle East territories besides Cyprus in which case both estimate of cost and allocation of priority will require reconsideration.
10. Provision for forestry scholars in revised C. D. & W. scheme D. 509 charged to C. D. & W.; remainder to Annual Revenue to be undertaken if funds permit.
11. Permanently required for expansion of Department's activities and therefore charged wholly to Annual Revenue. Priority scaled down conformably with the remainder of the forest programme.

4

A.—BY SCHEMES—*continued.*

Scheme	Para. of Chap.	Provision shewn for 1945–46 but unspent on 31.3.1946	Total Amount proposed 1946–56	Priority and Suggested Source of Finance								
				Colonial Development & Welfare Funds			Loan Funds			Annual Revenue Sources		
				1st Priority	2nd Priority	3rd Priority	1st Priority	2nd Priority	3rd Priority	1st Priority	2nd Priority	3rd Priority
	Chap. V.	£	£	£	£	£	£	£	£	£	£	£
MEDICAL.												
1. Nicosia Hospital and Nurses' Home ..	8–14	—	204,000	—	—	—	87,000	69,000	16,000	—	32,000	—
2. Limassol Hospital and Nurses' Home ..	15–17	—	32,000	—	—	—	—	20,000	10,000	—	2,000	—
3. Minor Improvements to District Hospitals ..	18	—	5,000	—	—	—	—	—	—	—	5,000	—
4. Additional Staff, Kyrenia and Paphos ..	18	—	3,000	—	—	—	—	—	—	—	—	3,000
5. Larnaca Hospital Extension	19	—	18,000	—	—	—	—	—	17,000	—	—	1,000
6. Famagusta Hospital ..	20	—	60,100	—	—	—	57,400	—	—	—	2,700	—
7. Kyperounda Sanatorium	22–31	800	97,600	17,300	—	—	35,000	—	28,000	18,100	—	—
8. Mental Hospital ..	32–36	—	129,800	—	—	—	—	125,000	—	—	4,800	—
9. Rural Health Units ..	42–58	19,500	245,600	119,500	—	—	—	—	—	145,600	—	—
10. School Medical Service	59–63	—	49,500	—	—	—	—	—	—	—	49,500	—
11. T.B. Dispensaries ..	64–68	800	8,000	—	—	—	—	—	—	8,800	—	—
12. Port Health Office	69–70	—	6,000	—	—	—	—	—	—	6,000	—	—
13. Training ..	71–75	3,400	55,000	47,122	—	—	—	—	—	—	—	11,278
Total		24,500	913,600	183,922	—	—	179,400	214,000	71,000	178,500	96,000	15,278

Scheme	Para. of Chap.	Provision shewn for 1945–46 but unspent on 31.3.1946	Total Amount proposed 1946–56	C.D. & W. 1st Priority	C.D. & W. 2nd Priority	C.D. & W. 3rd Priority	Loan 1st Priority	Loan 2nd Priority	Loan 3rd Priority	Annual Revenue 1st Priority	Annual Revenue 2nd Priority	Annual Revenue 3rd Priority
	Chap. VI	£	£	£	£	£	£	£	£	£	£	£
EDUCATION.												
1. Teachers' Training College	6	—	124,000	—	—	—	80,000	—	—	44,000	—	—
2. Women's Training College	7	—	172,000	—	—	—	100,000	—	—	72,000	—	—
3. Pay of Teachers ..	8–9	—	56,500	—	—	—	—	—	—	56,500	—	—
4. Building Grants ..	10–13	—	100,000	—	—	—	—	15,000	—	—	15,000	70,000
5. Inspectorate	14	—	18,600	—	—	—	—	—	—	18,600	—	—
6. English School ..	22–27	24,000	110,200	24,000	—	—	—	50,000	50,000	—	10,200	—
7. Village High Schools ..	28–29	—	76,000	—	—	—	—	—	—	—	—	76,000
8. Pay of Apprentices ..	30–33	—	38,700	—	—	—	—	—	—	38,700	—	—
9. Apprentices' Training Centre	30–33	—	27,300	—	—	—	3,900	—	—	23,400	—	—
10. Evening Classes ..	34	—	2,800	—	—	—	—	—	—	2,800	—	—
11. Agricultural Schools ..	36–40	—	96,000	—	—	—	40,000	20,000	—	24,000	12,000	—
12. Reform School ..	41–44	35,000	15,000	50,000	—	—	—	—	—	—	—	—
13. Probation Service ..	45–47	—	52,000	—	—	—	—	—	—	10,000	17,000	25,000
14. Training	49	3,400	29,900	28,602	—	—	—	—	—	—	4,698	—
15. Headquarters Staff ..	50	—	2,000	—	—	—	—	—	—	—	2,000	—
16. Specialist Staff.. ..	51	—	19,000	—	—	—	—	—	—	19,000	—	—
Total		62,400	940,000	102,602	—	—	223,900	85,000	50,000	309,000	60,898	171,000

4

REMARKS.

1. Capital cost charged to Loan Funds, 1st priority being given to Nurses' Home, 2nd to Extension of Hospital, and 3rd to Alterations to Existing Structure. Some overall reduction on estimates may be possible enabling all three projects to be undertaken with provision for first two. Additional Staff for hospital after extension charged to Annual Revenue.
2. Capital cost of modernisation charged to Loan Funds. Estimate may be susceptible of reduction and provision shown under 3rd priority may be saved. Cost of staff to Annual Revenue.
3. A normal charge on Annual Revenue.
4. A normal charge on Annual Revenue.
5. Provision of staff quarters of less urgency than medical schools. Capital cost charged to Loan Funds.
6. Capital cost charged to Loan Funds, additional staff to Annual Revenue. Existing hospital entirely unsatisfactory.
7. Capital cost of completing nurses' quarters under C. D. & W. Scheme D. 456 charged to C. D. & W. Capital cost of enlarging Sanatorium and X-ray equipment charged to 1st priority Loan Funds. Other additional building to 3rd priority Loan Funds; additional staff to Annual Revenue.
8. Capital cost to Loan Funds; additional cost of maintenance to Annual Revenue. Whole question of mental treatment in the Colony at present under review and it is hoped shortly to arrange for an expert survey. For the time being not possible to proceed with scheme outlined in the Report.
9. Balance of C. D. & W. grant D. 423 for initial cost of establishing units charged to C. D. & W.; staff, etc., to Annual Revenue. By far the most important medical scheme.
10. When established will become a permanent feature of departmental machine. Desirable but less urgent than other medical schemes.
11. Forms part of general scheme for improving tuberculosis service and should be undertaken together with improvements at Kyperounda. Will become a permanent feature of departmental machine.
12. Urgently required in view of increasing passenger traffic. A normal departmental charge.
13. Provision for medical scholars in revised C. D. & W. scheme D. 509 charged to C. D. & W.; remainder to Annual Revenue to be undertaken if funds permit.

1. Necessary for increasing supply of trained teachers which is prerequisite to other educational development. Capital cost charged to Loan Funds; recurrent cost to Annual Revenue sources.
2. As for item 1.
3. Consequential upon increase of teaching staff. A normal departmental charge.
4. In general of somewhat less urgency than other education building schemes; but additional schoolrooms and accommodation must be provided as soon as supply of teachers increases. A normal departmental activity.
5. Additional staff urgently needed to raise standard of teaching by present elementary school staff. A normal departmental charge.
6. Outstanding commitment for scheme D. 496 charged to C. D. & W.; remainder of capital cost to Loan Funds. Additional staff to Annual Revenue sources. Further extension desirable but of less urgency than other building schemes.
7. Of considerably less urgency than other schemes. Existing secondary schools may be unsatisfactory but go far to meet demand. Proportion of secondary school children is actually very high in Cyprus.
8. This modest scheme is the only provision for technical training in which improvement is urgently required. A permanent departmental charge.
9. As for item 8; capital cost of Centre charged to Loan Funds.
10. As for item 8.
11. Further agricultural schools such as the one already in successful operation urgently required. Partially scale down to 2nd Priority in order to preserve balance with remainder of educational programme. Capital cost to Loan Funds; recurrent cost to Annual revenue sources.
12. Urgent and scheme already before S. of S. Capital cost to C. D. & W.; recurrent is already being found in Annual Estimates.
13. Will remedy serious omission in present arrangements for dealing with juvenile delinquency. Considerable reduction on estimate now seems probable and is suggested by scaling down to 2nd and 3rd Priorities. A permanent departmental activity.
14. Implementation of many other schemes depends on training staff overseas. Urgent and important. Scholarship scheme already submitted to S. of S. provides £28,602 for educational schemes for 1946–56. Balance charged to Annual Revenue sources to be undertaken if funds permit.
15. Of somewhat less urgency than other staff requirements of the Department.
16. Staff urgently required for organising physical training and domestic science teaching in elementary schools.

A.—BY SCHEMES—*continued.*

Scheme	Para. of Chap.	Provision shewn for 1945–46 but unspent on 31.3.1946	Total Amount proposed 1946–56	Priority and Suggested Source of Finance								
				Colonial Development & Welfare Funds			Loan Funds			Annual Revenue Sources		
				1st Priority	2nd Priority	3rd Priority	1st Priority	2nd Priority	3rd Priority	1st Priority	2nd Priority	3rd Priority
	Chap.	£	£	£	£	£	£	£	£	£	£	£
ANTI-MALARIAL WORK.	VII											
1. Anti-malarial work ..	11	30,000	324,000	20,000	—	—	310,000	—	—	24,000	—	—
Total		30,000	324,000	20,000	—	—	310,000	—	—	24,000	—	—
CO-OPERATION.	Chap. VIII											
1. Assistance for Stores and Installation of Plant ..	11–12	—	20,000	20,000	—							
Total		—	20,000	20,000	—	—	—	—	—	—		
ROADS.	Chap. IX											
1. Reconditioning :—												
(*a*) P.W.D.	20	—	28,000	—	—	—	28,000					
(*b*) Commissioners' ..	21–22	—	84,000	—	—		84,000					
2. Improvement of Village Streets	23–30	—	150,000	—	—	—	150,000					
3. Improvement of Main Village Roads ..	31–32	—	120,000	—	—			120,000				
4. Eradication of Dangerous Features on Main Highways	33–34	—	30,000	—				30,000				
Total		—	412,000	—	—		262,000	150,000				
VILLAGE IMPROVEMENT.	Chap. X											
1. Village Water Supplies	9–11	6,100	392,550	197,550	—		197,550			3,550		
2. Storm Drainage ..	15–17	—	23,700	—	—			—		23,700		
3. Public Buildings ..	18–19	—	40,000	—	—			40,000				
4. Roadside Tree Planting	20–23	—	34,000	—	—		34,000					
Total		6,100	490,250	197,550	—		231,550	40,000	—	27,250		
HARBOURS.	Chap. XI											
1. Paphos: Repair and Extension of western mole	24	—	2,500	—	—	—	—	—	—	2,500		
2. Dredging Plant ..	27	—	11,000	11,000	—							
3. New dredging at Famagusta	28	—	40,000	—	—	—	40,000					—
4. New dredging at Paphos	28	—	9,000	—	—	—	9,000					—
5. New dredging at K'nia	28	—	4,000	—	—	—		4,000				—
6. Re-dredging at Larnaca	28	—	7,000	—	—	—	7,000					—
7. Maintenance dredging	28	—	10,000	—	—	—				10,000		—
Total		—	83,500	11,000	—	—	56,000	4,000	—	12,500		—

REMARKS.

1. Eradication if achieved will be of inestimable benefit to rural people, particularly in areas where villagers are undermined by chronic subjection to the disease. Cost of experimental scheme D. 591 charged to C. D. & W. Remainder of capital cost to Loan Funds. Recurrent cost after eradication is completed to Annual Revenue sources.

1. Assistance may be decisive in improving whole economy of backward villages.

1. } Imperative for preventing further deterioration and must be undertaken at once.
2. A major contribution towards improvement of living conditions in rural areas.
3. Important but of slightly less urgency than preceding road schemes.
4. As for item 3.

1. The basic requirement for improving living conditions in the villages. Prerequisite to improvement of sanitation and reduction of enteric disease in villages. Capital cost of half share payable from public funds divided between C. D. & W. and Loan Funds. Cost of maintenance and staff after completion charged to Annual Revenue sources.
2. An expansion of normal activity of district administration. A major contribution to improvement of living conditions in certain villages subjected to flood damage.
3. Important but of rather less urgency than other village improvement schemes.
4. To provide for intensive planting over short space of years. An amenity but of real importance. Routine planting on present scale will continue as a normal departmental activity.

1. To complete a scheme already half-done.

2. Equipment required for expanded dredging programme. A capital item charged to C. D. & W.
3. In preparation for any large development scheme but will itself greatly improve existing harbour facilities.

4. Present harbour is unsafe and further dredging will enable full advantage to be taken of scheme under item 1 above.
5. Of less urgency than other dredging.
6. Utility of existing port facilities much reduced by silting. Larnaca town largely dependent on its sea-borne trade and this scheme will contribute towards recovery from its present depression.
7. A normal departmental charge.

A.—BY SCHEMES—*continued.*

Scheme	Para. of Chap.	Provision shewn for 1945–46 but unspent on 31.3.1946	Total Amount proposed 1946–56	Priority and Suggested Source of Finance: Colonial Development & Welfare Funds			Loan Funds			Annual Revenue Sources		
				1st Priority	2nd Priority	3rd Priority	1st Priority	2nd Priority	3rd Priority	1st Priority	2nd Priority	3rd Priority
	Chap.	£	£	£	£	£	£	£	£	£	£	£
HOLIDAY RESORTS.	XII											
1. Improvements to Resorts :—												
(i) Platres :—												
Sports Pavilion ..	10	—	12,000	—	—	—	12,000	—	—	—	—	—
(ii) Prodhromos :—												
Survey & Town Plan	12	—	700	—	—	—	700	—	—	—	—	—
Development Roads	12	—	6,000	—	—	—	6,000	—	—	—	—	—
Tennis Courts ..	12	—	1,000	—	—	—	1,000	—	—	—	—	—
Canalisation of water	12	—	1,000	—	—	—	1,000	—	—	—	—	—
(iii) Troodos :—												
Transfer of W.D. land	14	—	6,000	—	—	—	6,000	—	—	—	—	—
Development Road	14	—	6,000	—	—	—	6,000	—	—	—	—	—
Water Supply ..	14	—	5,000	—	—	—	5,000	—	—	—	—	—
(iv) Unspecified Development in Hill Resorts	16	—	15,000	—	—	—	—	15,000	—	—	—	—
(v) Famagusta :—												
Sports Pavilion ..	21	—	4,000	—	—	—	—	4,000	—	—	—	—
2. Antiquities :—												
Access Roads	23	—	16,200	16,200	—	—	—	—	—	—	—	—
Kyrenia Castle ..	23	—	9,200	9,200	—	—	—	—	—	—	—	—
Amenities	23	—	4,600	4,600	—	—	—	—	—	—	—	—
Museum Extension ..	25–26	—	20,000	—	20,000	—	—	—	—	—	—	—
3. Spas :—												
Technical Advice ..	31	—	500	—	—	—	500	—	—	—	—	—
Pumproom & clinic ..	30–31	—	10,000	—	—	—	10,000	—	—	—	—	—
4. Winter sports :—												
Snow clearance ..	33	—	1,800	—	—	—	800	—	—	1,000	—	—
5. Tourist Department ..	36	—	41,200	—	—	—	5,200	—	—	36,000	—	—
6. Publicity	37	—	18,000	—	—	—	—	—	—	18,000	—	—
Total		—	178,200	30,000	20,000	—	54,200	19,000	—	55,000	—	—
PRISONS	XIII		Nil.									
MISCELLANEOUS.	XIV											
1. Town Planning ..	2–3	—	8,000	—	—	—	8,000	—	—	—	—	—
2. Housing Subsidies ..	8–10	7,100	40,000	47,100	—	—	—	—	—	—	—	—
3. Drainage Survey ..	13	—	1,500	—	—	—	1,500	—	—	—	—	—
4. Staff Training	28	—	25,800	25,800	—	—	—	—	—	—	—	—
Total		7,100	75,300	72,900	—	—	9,500	—	—	—	—	—

REMARKS.

(i) A revenue-earning project which should be of material assistance in enabling resort to consolidate its recent gains in foreign visitor trade.

(ii) }
Prerequisite to further development.
(iii) }

(iv) May not be required but should be held in readiness against rapid expansion of visitor trade.

(v) A revenue-earning project. Of somewhat less urgency than previous schemes having regard to volume of visitor traffic in Famagusta.

2. At comparatively small cost Kyrenia and its neighbouring monuments may be rendered strikingly attractive and impressive and may greatly enhance reputation of Cyprus as a resort.

3. Will increase and further diversify attractions of Cyprus for visitors. If successfully developed may contribute as much as a 10% increase in visitor trade.

4. Of considerable potential importance fully meriting small charge involved. Capital cost to Loan Funds; recurrent cost to annual revenue sources.
5. Tourist industry is urgently in need of guidance and control. Capital cost of tourist bureaux charged to Loan Funds.
6. Reputation of the Island as a resort will depend to a large extent on judicious use of publicity.

1. Urgently required in all towns as a prerequisite to further development.
2. For housing a comparatively small number of urban tenant families who are now living in overcrowded khans and tenements.
3. In Nicosia a proper drainage scheme is second only in urgency to water supply. The first step must be an expert survey.
4. Implementation of many other schemes depends on training staff overseas. Urgent and important. Scholarship scheme already submitted to S. of S. makes provision for Administrative, Treasury, P.W.D., Antiquities and Land Registration and Survey scholars for 1946/56.

B.—Summary by Departments or Services.

Source	Agriculture				Irrigation				Forests			
	Priority			Total	Priority			Total	Priority			Total
	1st	2nd	3rd		1st	2nd	3rd		1st	2nd	3rd	
	£	£	£	£	£	£	£	£	£	£	£	£
Colonial Development & Welfare	69,115	12,800	—	81,915	560,617	14,000	—	574,617	124,460	13,000	—	137,460
Loan Funds	203,300	53,000	67,000	323,300	140,000	85,883	—	225,883	267,900	169,000	50,000	486,900
Total	272,415	65,800	67,000	405,215	700,617	99,883	—	800,500	392,360	182,000	50,000	624,360
Annual Revenue Sources	56,500	26,100	83,285	165,885	70,000	—	63,300	133,300	98,000	50,000	107,840	255,840
Total	328,915	91,900	150,285	571,100	770,617	99,883	63,300	933,800	490,360	232,000	157,840	880,200

Source	Medical				Education				Anti-Malarial			
	Priority			Total	Priority			Total	Priority			Total
	1st	2nd	3rd		1st	2nd	3rd		1st	2nd	3rd	
	£	£	£	£	£	£	£	£	£	£	£	£
Colonial Development & Welfare	183,922	—	—	183,922	102,602	—	—	102,602	20,000	—	—	20,000
Loan Funds	179,400	214,000	71,000	464,400	223,900	85,000	50,000	538,900	310,000	—	—	310,000
Total	363,322	214,000	71,000	648,322	326,502	85,000	50,000	461,502	330,000	—	—	330,000
Annual Revenue Sources	178,500	96,000	15,278	289,778	309,000	60,898	171,000	540,898	24,000	—		24,000
Total	541,822	310,000	86,278	938,100	635,502	145,898	221,000	1,002,400	354,000	—	—	354,000

Source	Co-operation				Roads				Village Improvement			
	Priority			Total	Priority			Total	Priority			Total
	1st	2nd	3rd		1st	2nd	3rd		1st	2nd	3rd	
Colonial Development & Welfare	20,000	—	—	20,000	—	—	—	—	197,550	—	—	197,550
Loan Funds	—	—	—	—	262,000	150,000	—	412,000	231,550	40,000	—	271,550
Total	20,000	—	—	20,000	262,000	150,000	—	412,000	429,100	40,000	—	469,100
Annual Revenue Sources	—	—	—	—	—	—	—	—	27,250	—		27,250
Total	20,000	—	—	20,000	262,000	150,000	—	412,000	456,350	40,000	—	496,350

Source	Harbours				Holiday Resorts				Miscellaneous			
	Priority			Total	Priority			Total	Priority			Total
	1st	2nd	3rd		1st	2nd	3rd		1st	2nd	3rd	
	£	£	£	£	£	£	£	£	£	£	£	£
Colonial Development & Welfare	11,000	—	—	11,000	30,000	20,000	—	50,000	72,900	—	—	72,900
Loan Funds	56,000	4,000	—	60,000	54,000	19,000	—	73,200	9,500	—	—	9,500
Total	67,000	4,000	—	71,000	84,200	39,000	—	123,200	82,400	—	—	82,400
Annual Revenue Sources	12,500	—	—	12,500	55,000	—	—	55,000	—	—	—	—
Total	79,500	4,000	—	83,500	139,200	39,000	—	178,200	82,400	—	—	82,400

C.—GENERAL SUMMARY OF ALLOCATIONS.

Department or Service	Chap.	Provision shewn for 1945–46 but unspent on 31.3.1946	Total Amount proposed 1946–56	Priority and suggested source of Finance								
				1st Priority			2nd Priority			3rd Priority		
				C. D. & W.	Loan Funds	Annual Revenue	C. D. &.W.	Loan Funds	Annual Revenue	C. D. &. W.	Loan Funds	Annual Revenue
		£	£	£	£	£	£	£	£	£	£	£
1. Agriculture	II	18,000	553,100	69,115	203,300	56,500	12,800	53,000	26,100	—	67,000	83,285
2. Irrigation	III	16,000	917,800	560,617	140,000	70,000	14,000	85,883	—	—	—	63,300
3. Forests	IV	—	880,200	124,460	267,900	98,000	13,000	169,000	50,000	—	50,000	107,840
4. Medical	V	24,500	913,600	183,922	179,400	178,500	—	214,000	96,000	—	71,000	15,278
5. Education	VI	62,400	940,000	102,602	223,900	309,000	—	85,000	60,898	—	50,000	171,000
6. Anti-Malarial Work ..	VII	30,000	324,000	20,000	310,000	24,000	—	—	—	—	—	—
7. Co-operation	VIII	—	20,000	20,000	—	—	—	—	—	—	—	—
8. Roads	IX	—	412,000	—	262,000	—	—	150,000	—	—	—	—
9. Village Development ..	X	6,100	490,250	197,550	231,550	27,250	—	40,000	—	—	—	—
10. Harbours	XI	—	83,500	11,000	56,000	12,500	—	4,000	—	—	—	—
11. Holiday Resorts ..	XII	—	178,200	30,000	54,200	55,000	20,000	19,000	—	—	—	—
12. Prisons	XIII	—	—	—	—	—	—	—	—	—	—	—
13. Miscellaneous :—	XIV											
Town Planning ..		—	8,000	—	8,000	—	—	—	—	—	—	—
Housing Subsidies ..		7,100	40,000	47,100	—	—	—	—	—	—	—	—
Drainage Survey ..		—	1,500	—	1,500	—	—	—	—	—	—	—
Staff Training ..		—	25,800	25,800	—	—	—	—	—	—	—	—
Total		164,100	5,787,950	1,392,166	1,937,75	830,750	59,800	819,883	232,998	—	238,000	440,703

NOTES.

1 £9,370, shewn under C. D. & W. 1st Priority, may be chargeable to centrally administered C. D. & W. scholarship scheme.

2 £14,000, shewn under C. D. & W. 2nd Priority, may be chargeable to centrally administered C. D. & W. scheme for geodetic and topographical surveys.

3 £3,600, shewn under C. D. & W. 1st Priority, may be chargeable to centrally administered C. D. & W. scholarship scheme. £13,600, being capital cost of Forest School shewn under C. D. & W. 2nd Priority, may be chargeable to centrally administered C. D. & W. research allocation.

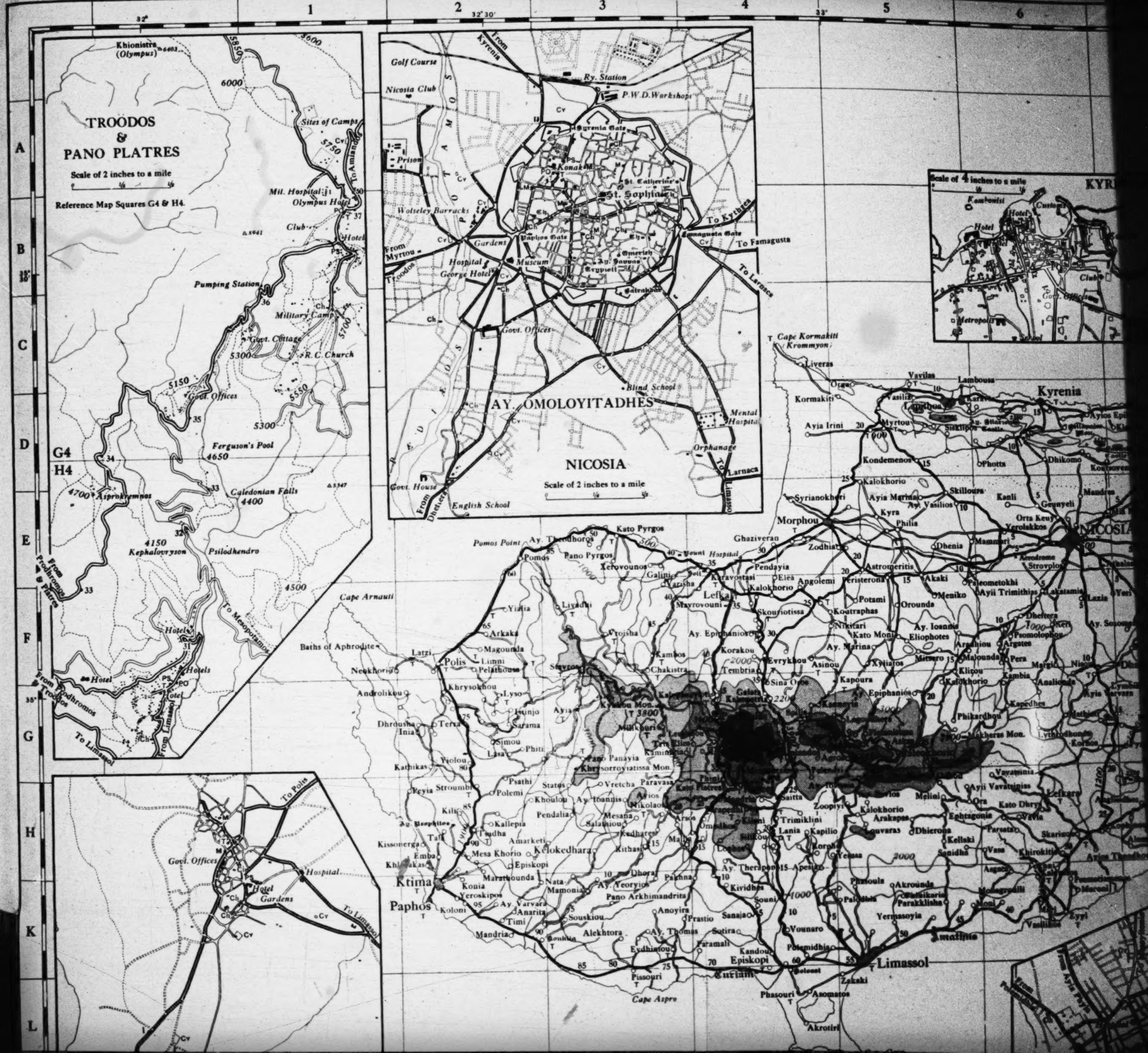
4 £27,208, shewn under C. D. & W. 1st Priority, may be chargeable to centrally administered C. D. & W. scholarship scheme.

5 £22,720, shewn under C. D. & W. 1st Priority, may be chargeable to centrally administered C. D. & W. scholarship scheme.

£25,800, shewn under C. D. & W. 1st Priority, may be chargeable to centrally administered C. D. & W. scholarship scheme.

1st Priority £4,160,666 ; 2nd Priority £1,112,681 ; 3rd Priority £678,703.

The total sum which, as suggested in the Notes above, may be chargeable to centrally administered C. D. & W. schemes, is £113,403, of which £86,403 is in respect of first Priority schemes and £27,000 in respect of 2nd Priority schemes.


1
2
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32°
32° 30′
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A
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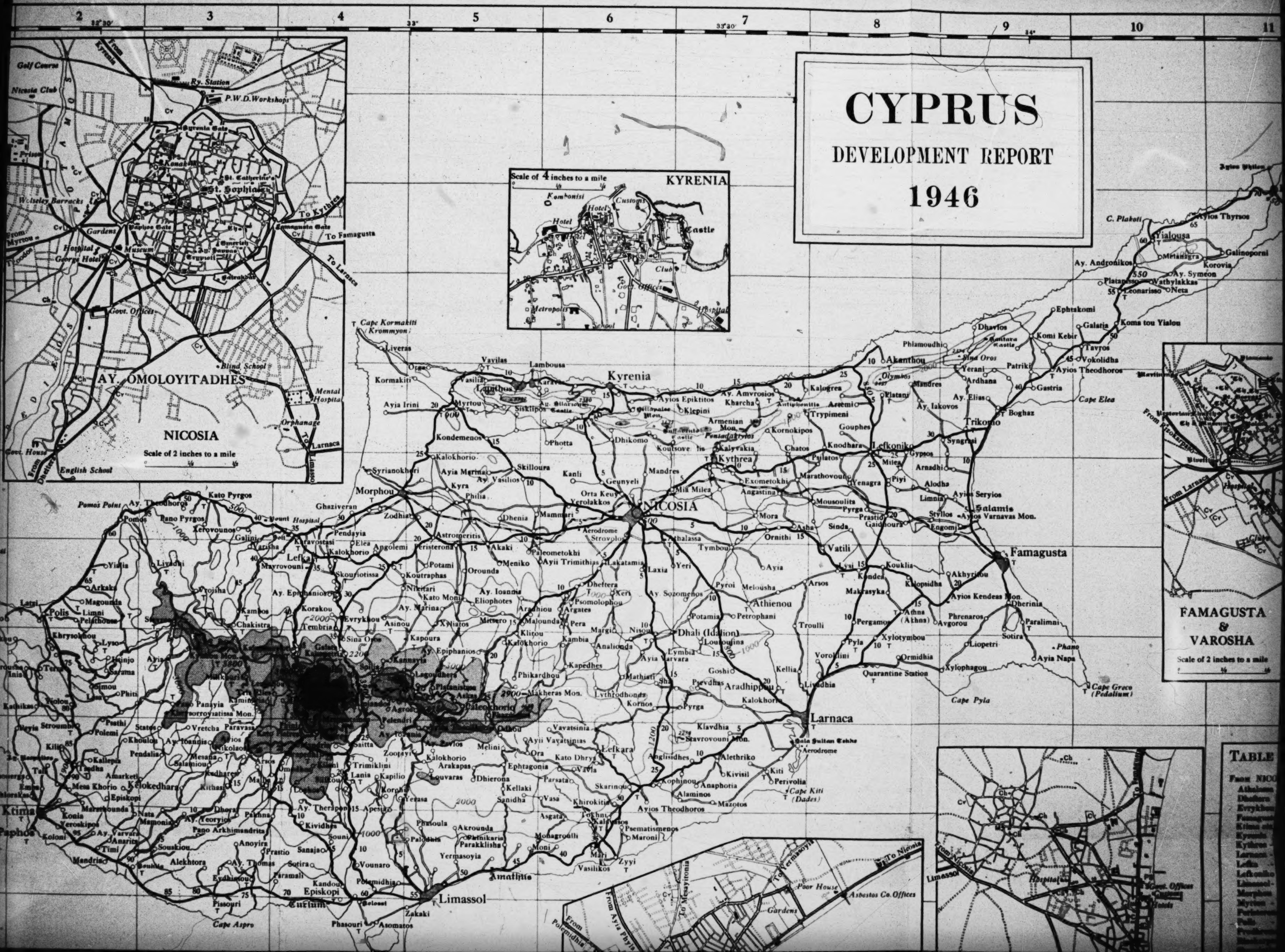
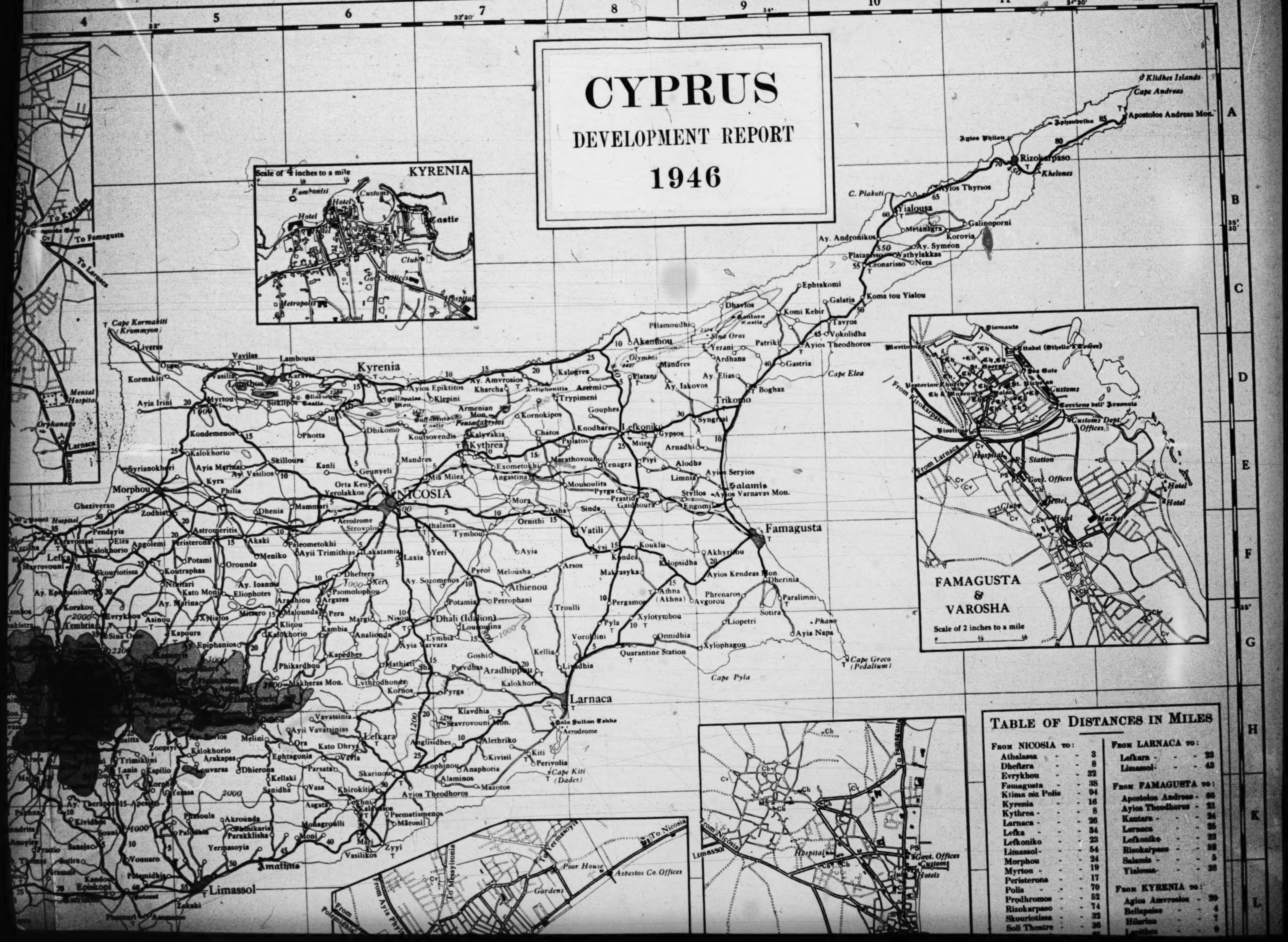
TROODOS & PANO PLATRES
Scale of 2 inches to a mile
Reference Map Squares G4 & H4.
Khionistra (Olympus) 6403
5850
5600
6000
Sites of Camps
5750
To Amiandos
Mil. Hospital
Olympus Hotel
Club
Hotel
5941
Pumping Station
Military Camp
Govt. Cottage
R.C. Church
5700
5300
5150
Govt. Offices
5550
5300
Ferguson's Pool
4650
Caledonian Falls
4400
5347
G4
H4
4700
Asprokremnos
4150
Kephalovryson
Psilodhendro
4500
To Mesopotamos
From Prodhromos & Platres
Hotel
Hotels
From Prodhromos & Troodos
To Limassol
From Limassol
Golf Course
From Kyrenia
Ry. Station
Nicosia Club
P.W.D. Workshops
Kyrenia Gate
Prison
Konak
St. Catherine's
St. Sophia
Wolseley Barracks
To Kythrea
Famagusta Gate
To Famagusta
From Myrtou
Gardens
Paphos Gate
Hospital
Museum
George Hotel
Troodos
To Larnaca
Govt. Offices
Blind School
AY. OMOLOYITADHES
Mental Hospital
Orphanage
NICOSIA
Scale of 2 inches to a mile
Govt. House
English School
From Dheftera
To Larnaca
To Limassol
PEDIEOS POTAMOS
Scale of 4 inches to a mile
KYRENIA
Hotel
Customs
Club
Govt. Offices
Metropolis
School
Govt. Offices
Hospital
Hotel
Gardens
To Polis
To Limassol
Cape Kormakiti (Krommyon)
Liveras
Kormakiti
Vavilas
Lambousa
Kyrenia
Vasilia
Lapithos
Karavas
Ayia Irini
Myrtou
Sisklipos
Kondemenos
Photta
Dhikomo
Kalokhorio
Skillouria
Syrianokhori
Ayia Marina
Ay. Vasilios
Kanli
Geunyeli
Morphou
Kyra
Philia
Orta Keuy
Yerolakkos
NICOSIA
Ghaziveran
Zodhia
Dhenia
Mammari
Strovolos
Pomos Point
Ay. Theodhoros
Kato Pyrgos
Pano Pyrgos
Pomos
Xerovounos
Vouni
Pendayia
Elea
Astromeritis
Peristerona
Akaki
Paleometokhi
Ayii Trimithias
Lakatamia
Galini
Karavostasi
Lefka
Kalokhorio
Angolemi
Potami
Orounda
Meniko
Cape Arnauti
Yialia
Livadhi
Mavrovouni
Skouriotissa
Koutraphas
Nikitari
Kato Moni
Ay. Ioannis
Eliophotes
Dheftera
Psomolophou
Arkaka
Vrojsha
Ay. Epiphanios
Ay. Marina
Argates
Baths of Aphrodite
Magounda
Kambos
Korakou
Evrykhou
Xyliatos
Mitsero
Arakhou
Malounda
Pera
Latzi
Polis
Limni
Pelathousa
Stavros
Chakistra
Tembria
Sina Oros
Asinou
Kapoura
Klirou
Kalokhorio
Kambia
Analiondas
Neokhorio
Androlikou
Khrysokhou
Lyso
Kykko Mon.
3800
Ayia
Epiphanios
Phikardhou
Kapedhes
Dhrousha
Inia
Terra
Tsunjo
Sarama
Milikouri
Makheras Mon.
Lythrodhonda
Simou
Lasa
Phiti
Kathikas
Yiolou
Pano Panayia
Khrysorroyiatissa Mon.
Vavatsinia
Peyia
Stroumbi
Psathi
Polemi
Statos
Vretcha
Paravasa
Ayii Vavatsinias
Lefkara
Khoulou
Ay. Ioannis
Ayios Nikolaos
Phini
Kato Platres
Saitta
Zoopiyi
Melini
Ora
Kato Dhrys
Kili
Pendalia
Mesana
Salamiou
Trimiklini
Lania
Kapilio
Kalokhorio
Arakapas
Eghtagonia
Vavla
Ay. Neophitos
Kallepia
Kedhares
Arsos
Omodhos
Silikou
Dhierona
Parsata
Skarinou
Kissonerga
Tala
Tsadha
Amarketi
Kelokedhara
Kithasi
Malia
Koilani
Louvaras
Kellaki
Vasa
Khirokitia
Emba
Khlorakas
Mesa Khorio
Episkopi
Korphi
Vessa
Sanidha
Ayios Theodhoros
Ktima
Paphos
Marathounda
Konia
Yeroskipos
Nata
Mamonia
Dhora
Ay. Yeoryios
Pakhna
Ay. Therapon
Apesha
Phasoula
Akrounda
Parakklisha
Monagroulli
Moni
Koloni
Ay. Varvara
Anarita
Timi
Pano Arkhimandrita
Anoyira
Prastio
Kividhes
Souni
Sanaja
Yermasoyia
Vasiliko
Zyyi
Amathus
Souskiou
Alekhtora
Ay. Thomas
Sotira
Vounaro
Polemidhia
Mandria
Koukla
Evdhimou
Paramali
Kandou
Episkopi
Limassol
Pissouri
Curium
Kolossi
Zakaki
Asomatos
Phasouri
Cape Aspro
Akrotiri
1000
2000
3000
2200
5900


CYPRUS
DEVELOPMENT REPORT
1946
2
3
4
5
6
7
8
9
10
11
32°30'
33°
33°30'
34°
NICOSIA
Scale of 2 inches to a mile
Golf Course
Nicosia Club
Ry. Station
P.W.D. Workshops
Kyrenia Gate
St. Catherine's
St. Sophia
Wolseley Barracks
Paphos Gate
Famagusta Gate
To Kythrea
To Famagusta
To Larnaca
Gardens
Hospital
George Hotel
Museum
Govt. Offices
Blind School
AY. OMOLOYITADHES
Mental Hospital
Orphanage
Govt. House
English School
From Myrtou
From Kyrenia
From Dheftera
Limassol
Larnaca
KYRENIA
Scale of 4 inches to a mile
Kombonisi
Hotel
Customs
Castle
Club
Govt. Offices
Hospital
Metropolis
School
FAMAGUSTA
&
VAROSHA
Scale of 2 inches to a mile
From Larnaca
TABLE
From Nicosia
Athalassa
Dheftera
Evrykhou
Famagusta
Ktima
Kyrenia
Kythrea
Larnaca
Lefka
Lefkoniko
Limassol
Morphou
Myrtou
Polis
Limassol
From Nicosia
Hospital
Govt. Offices
From Ayia Phyla
From Polemidhia
To Mesayitonia
To Vermasoyia
To Nicosia
Poor House
Asbestos Co. Offices
Gardens
Cape Kormakiti (Krommyon)
Liveras
Kormakiti
Ayia Irini
Vasilia
Vavilas
Lambousa
Lapithos
Karavas
Myrtou
Kyrenia
Ay. Hilarion Castle
Sisklipos
Ayios Epiktitos
Kharcha
Klepini
Bellapais Abbey
Armenian Mon.
Pentadaktylos
Buffavento Castle
Antiphonitis
Kalogrea
Akanthou
Artemi
Trypimeni
Kornokipos
Platani
Phlamoudhi
Kantara Castle
Sina Oros
Yerani
Mandres
Ay. Iakovos
Patriki
Ardhana
Komi Kebir
Ay. Elias
Tavros
Vokolidha
Ayios Theodhoros
Gastria
Cape Elea
Boghaz
Trikomo
Ephtakomi
Galatia
Koma tou Yialou
Dhavlos
Ay. Andronikos
Platanisso
Leonarisso
Vathylakkas
Neta
Ay. Symeon
Korovia
Galinoporni
Yialousa
Melanagra
C. Plakoti
Ayios Thyrsos
Ayios Philon
Kondemenos
Kalokhorio
Photta
Dhikomo
Koutsovendis
Kalyvakia
Kythrea
Chatos
Gouphes
Knodhara
Lefkoniko
Gypsos
Milea
Syngrasi
Arnadhi
Psilatos
Marathovouno
Yenagra
Piyi
Alodha
Limnia
Ayios Seryios
Salamis
Ayios Varnavas Mon.
Styllos
Engomi
Famagusta
Syrianokhori
Ayia Marina
Ay. Vasilios
Skilloura
Kanli
Geunyeli
Mandres
Mia Milea
Exometokhi
Angastina
Mousoulita
Pyrga
Prastio
Gaidhouras
Morphou
Kyra
Philia
Ghaziveran
Zodhia
Dhenia
Mammari
Orta Keuy
Yerolakkos
NICOSIA
Aerodrome
Strovolo
Athalassa
Mora
Ornithi
Asha
Sinda
Vatili
Tymbou
Ayia
Lysi
Kouklia
Kondea
Kalopsidha
Akhyritou
Ayios Kendeas Mon.
Dherinia
Paralimni
Sotira
Phrenaros
Avgorou
Liopetri
Ayia Napa
Phano
Cape Greco (Pedalium)
Cape Pyla
Xylophagou
Ormidhia
Quarantine Station
Xylotymbou
Pyla
Pergamos
Athna (Akhna)
Makrasyka
Arsos
Troulli
Voroklini
Livadhia
Kellia
Larnaca
Hala Sultan Tekke
Aerodrome
Kiti
Perivolia
Cape Kiti (Dades)
Pomos Point
Ay. Theodhoros
Kato Pyrgos
Pano Pyrgos
Pomos
Xerovounos
Galini
Karavostasi
Mount Hospital
Pendayia
Elea
Kalokhorio
Angolemi
Peristerona
Astromeritis
Akaki
Paleometokhi
Ayii Trimithias
Lakatamia
Laxia
Yeri
Pyroi
Meloushia
Athienou
Petrophani
Potamia
Dhali (Idalion)
Louroujina
Lymbia
Ayia Varvara
Goshi
Psevdhas
Aradhippou
Kalokhorio
Lefka
Mavrovouni
Skouriotissa
Potami
Koutraphas
Nikitari
Kato Moni
Eliophotes
Orounda
Meniko
Ay. Ioannis
Dheftera
Psomolophou
Xeri
Ay. Sozomenos
Arediou
Malounda
Argates
Pera
Margi
Nisou
Kambia
Analiondas
Kapedhes
Mathiati
Sha
Lythrodhonda
Kornos
Pyrga
Klavdhia
Stavrovouni Mon.
Makheras Mon.
Lefkara
Anglisidhes
Alethriko
Kivisil
Kophinou
Anaphotia
Alaminos
Mazotos
Skarinou
Ayios Theodhoros
Khirokitia
Tokhni
Kalavasos
Psematismenos
Maroni
Zyyi
Mari
Vasilikos
Vavatsinia
Ayii Vavatsinias
Ora
Kato Dhrys
Vavla
Parsata
Melini
Ephtagonia
Dhierona
Arakapas
Louvaras
Kellaki
Sanidha
Vasa
Asgata
Monagroulli
Moni
Amathus
Limassol
Yermasoyia
Akrounda
Phinikaria
Parakklisha
Palodhia
Phasoula
Yerasa
Apesia
Korphi
Kapilio
Lania
Trimiklini
Zoopiyi
Kalokhorio
Saitta
Ay. Therapon
Kividhes
Souni
Vouni
Vounaro
Polemidhia
Kandou
Episkopi
Curium
Colossi
Phasouri
Asomatos
Zakaki
Pissouri
Cape Aspro
Alekhtora
Ay. Thomas
Sotira
Paramali
Evdhimou
Prastio
Sanajao
Anoyira
Pano Arkhimandrita
Souskiou
Timi
Mandria
Kouklia
Anarita
Ay. Varvara
Koloni
Yeroskipos
Paphos
Ktima
Konia
Marathounda
Mesa Khorio
Episkopi
Amarketi
Kelokedhara
Nata
Mamonia
Ay. Yeoryios
Dhora
Pakhna
Malia
Arsos
Omodhos
Kithasi
Salamiou
Mesana
Ay. Ioannis
Khoulou
Pendalia
Statos
Vretcha
Paravasa
Kannaviou
Kato Panayia
Chrysorroyiatissa Mon.
Kaminaria
Trooditissa
Prodhromos
Pedhoulas
Platres
Troodos
Kakopetria
Galata
Spilia
Sina Oros
Evrykhou
Tembria
Korakou
Kalopanayiotis
Kannavia
Ay. Epiphanios
Lagoudhera
Asinou
Ay. Marina
Xyliatos
Mitsero
Kapoura
Platanistasa
Askas
Paleokhorio
Polystipos
Agros
Pelendri
Potamitissa
Phikardhou
Klirou
Kalokhorio
Chakistra
Kambos
Ay. Epiphanios
Pyrgos
Pyrgos
Vrojsha
Livadhi
Kato Yialia
Yialia
Varisha
Arkaka
Magounda
Limni
Pelathousa
Latsi
Polis
Khrysokhou
Lyso
Ayia Marina
Terra
Sarama
Simou
Phiti
Kathikas
Inia
Stroumbi
Polemi
Psathi
Kili
Tsadha
Tala
Kallepia
Emba
Khlorakas
Lefka
Ay. Irini
Ay. Philon
2000
3000
3500
2200
2900
1000
1200
1900
2800
550
T


KYRENIA
Scale of 4 inches to a mile
FAMAGUSTA & VAROSHA
Scale of 2 inches to a mile
NICOSIA
Kyrenia
Famagusta
Larnaca
Limassol
Morphou
Lefkoniko
Trikomo
Rizokarpaso
Yialousa
Lefkara
Cape Andreas
Cape Kormakiti
Cape Greco (Pedalium)
Cape Pyla
Cape Elea
C. Plakoti
Klidhes Islands
Apostolos Andreas Mon.
Salamis
Kythrea
Athienou
Dhali (Idalion)
Ayia Napa
Amathus
To Nicosia
To Famagusta
To Larnaca
Mental Hospital
Orphanage
Asbestos Co. Offices
Poor House
Govt. Offices
Customs
Hospital
Hotel
Castle

CYPRUS

DEVELOPMENT REPORT

1946

TABLE OF DISTANCES IN MILES

FROM NICOSIA TO:

Athalassa	3
Dheftera	8
Evrykhou	32
Famagusta	38
Ktima *via* Polis	94
Kyrenia	16
Kythrea	8
Larnaca	26
Lefka	34
Lefkoniko	23
Limassol	54
Morphou	24
Myrtou	19
Peristerona	17
Polis	70
Prodhromos	52
Rizokarpaso	74
Skouriotissa	33
Soli Theatre	36

FROM LARNACA TO:

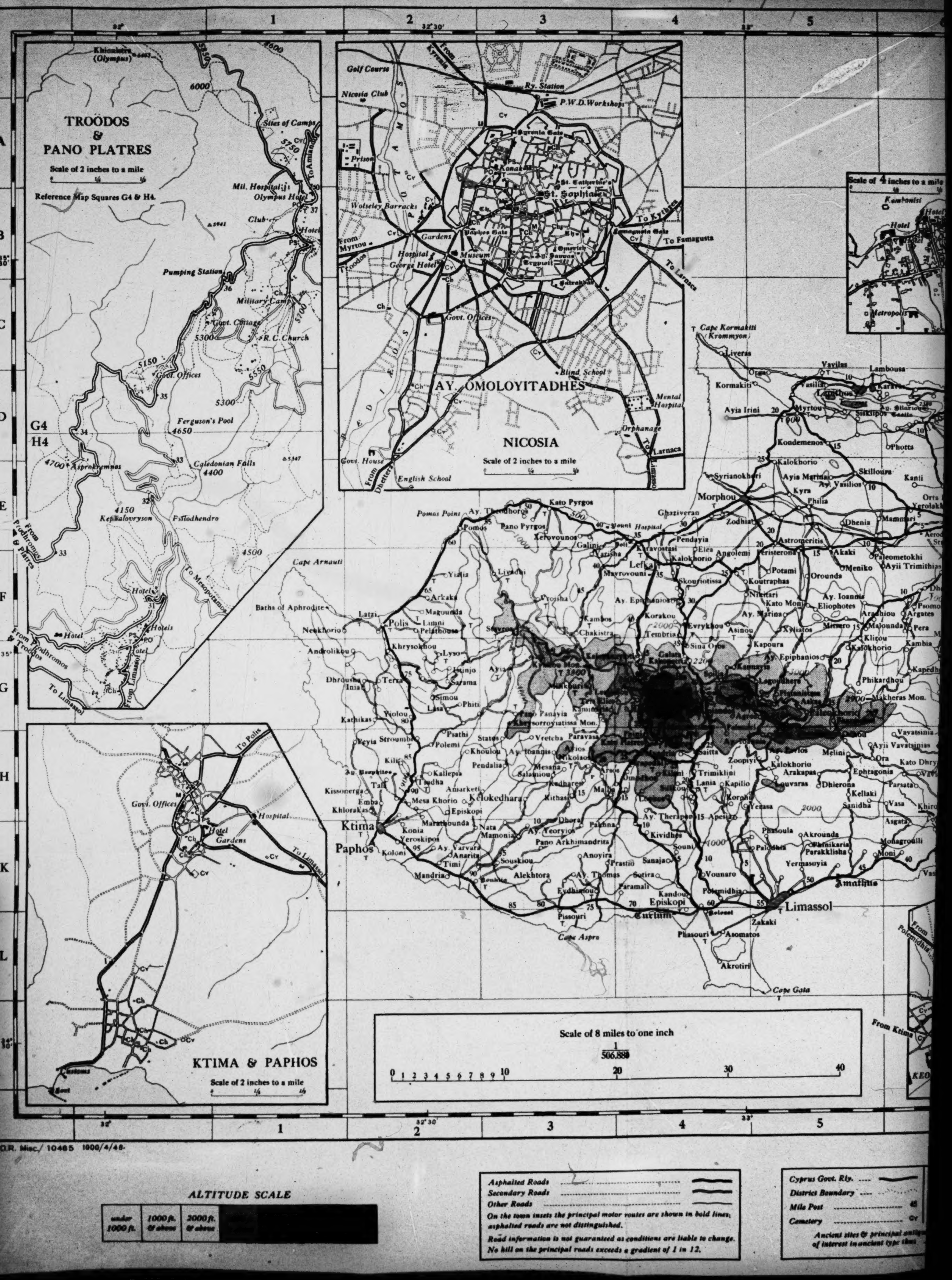
Lefkara	23
Limassol	43

FROM FAMAGUSTA TO:

Apostolos Andreas	66
Ayios Theodhoros	21
Kantara	24
Larnaca	25
Lefkoniko	22
Rizokarpaso	58
Salamis	5
Yialousa	38

FROM KYRENIA TO:

Ayios Amvrosios	20
Bellapaise	4
Hilarion	7


TROODOS & PANO PLATRES
Scale of 2 inches to a mile
Reference Map Squares G4 & H4.
Khionistra (Olympus)
Sites of Camps
Mil. Hospital
Olympus Hotel
Club
Hotel
Pumping Station
Military Camp
Govt. Cottage
R.C. Church
Govt. Offices
Ferguson's Pool
Caledonian Falls
Kephalovryson
Psilodhendro
Asprokremmos
To Mesopotamos
From Prodhromos & Platres
From Prodhromos & Troodos
To Limassol
From Limassol
Hotels
G4
H4
NICOSIA
Scale of 2 inches to a mile
AY. OMOLOYITADHES
Golf Course
Nicosia Club
Prison
Wolseley Barracks
Ry. Station
P.W.D. Workshops
St. Catherine's
St. Sophia
Kyrenia Gate
Paphos Gate
Famagusta Gate
Museum
Gardens
Hospital
George Hotel
Govt. Offices
Blind School
Mental Hospital
Orphanage
Govt. House
English School
From Kyrenia
From Myrtou
To Kythrea
To Famagusta
To Larnaca
To Limassol
KTIMA & PAPHOS
Scale of 2 inches to a mile
To Polis
Govt. Offices
Hospital
Hotel
Gardens
To Limassol
Scale of 4 inches to a mile
Metropolis
Morphou
Lefka
Polis
Ktima
Paphos
Limassol
Episkopi
Curium
Amathus
Akrotiri
Cape Kormakiti (Krommyon)
Cape Arnauti
Baths of Aphrodite
Pomos Point
Cape Aspro
Cape Gata
Scale of 8 miles to one inch
1/506.880
0 1 2 3 4 5 6 7 8 9 10 20 30 40
ALTITUDE SCALE
under 1000 ft.
1000 ft. & above
2000 ft. & above
Asphalted Roads
Secondary Roads
Other Roads
On the town insets the principal motor routes are shown in bold lines; asphalted roads are not distinguished.
Road information is not guaranteed as conditions are liable to change.
No hill on the principal roads exceeds a gradient of 1 in 12.
Cyprus Govt. Rly.
District Boundary
Mile Post 45
Cemetery Cv
Ancient sites & principal antiq of interest in ancient type thus
32° 32°30' 33°
35°
1 2 3 4 5
A B C D E F G H K L

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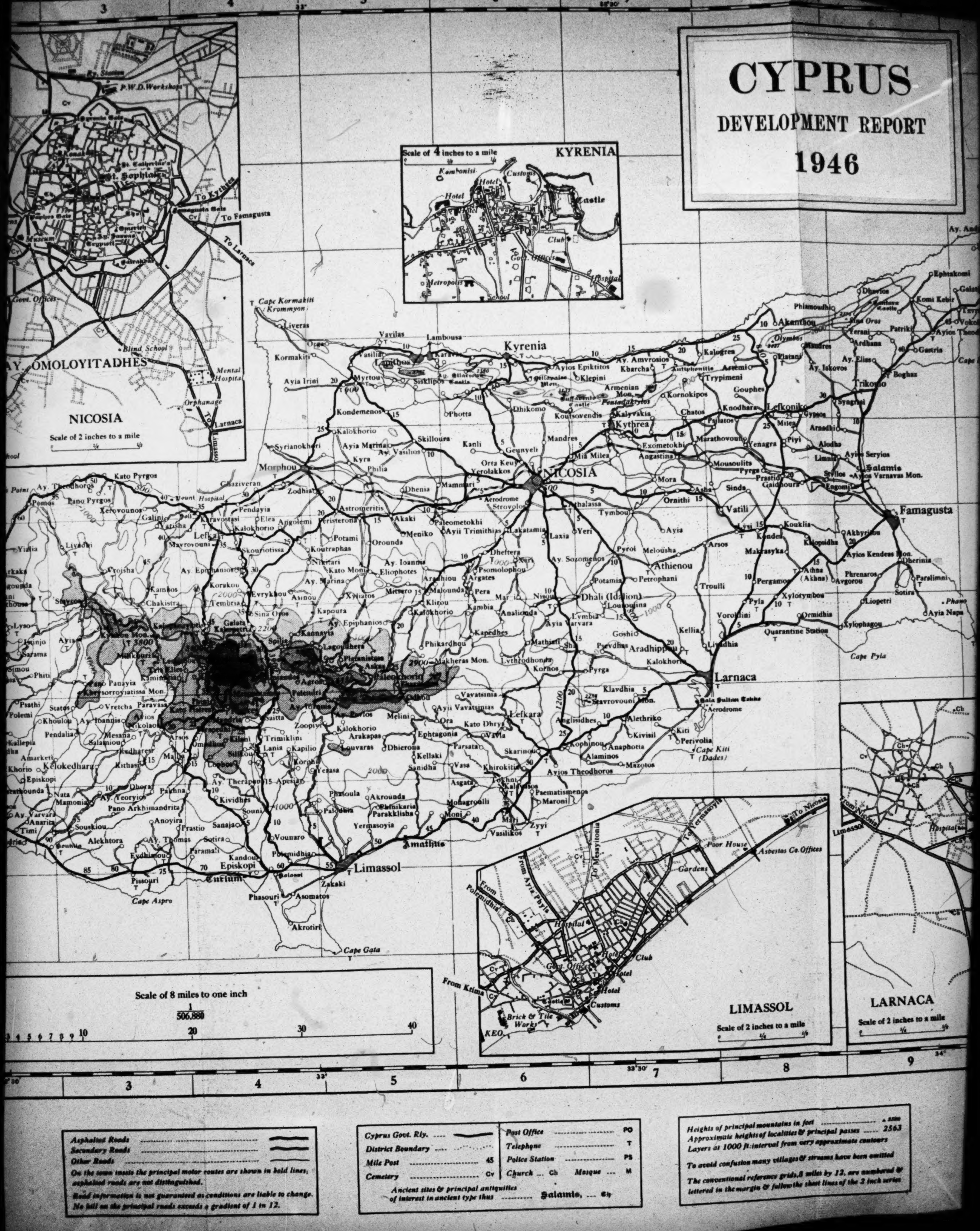
CYPRUS

DEVELOPMENT REPORT

1946


KYRENIA
Scale of 4 inches to a mile
NICOSIA
Scale of 2 inches to a mile
LIMASSOL
Scale of 2 inches to a mile
LARNACA
Scale of 2 inches to a mile
Scale of 8 miles to one inch
1/506,880
NICOSIA
Kyrenia
Famagusta
Larnaca
Limassol
Morphou
Salamis
Curium
Amathus
Asphalted Roads
Secondary Roads
Other Roads
Cyprus Govt. Rly.
District Boundary
Mile Post 45
Cemetery Cv
Post Office PO
Telephone T
Police Station PS
Church Ch
Mosque M
Ancient sites & principal antiquities of interest in ancient type thus Salamis
Heights of principal mountains in feet
Approximate heights of localities & principal passes 2563

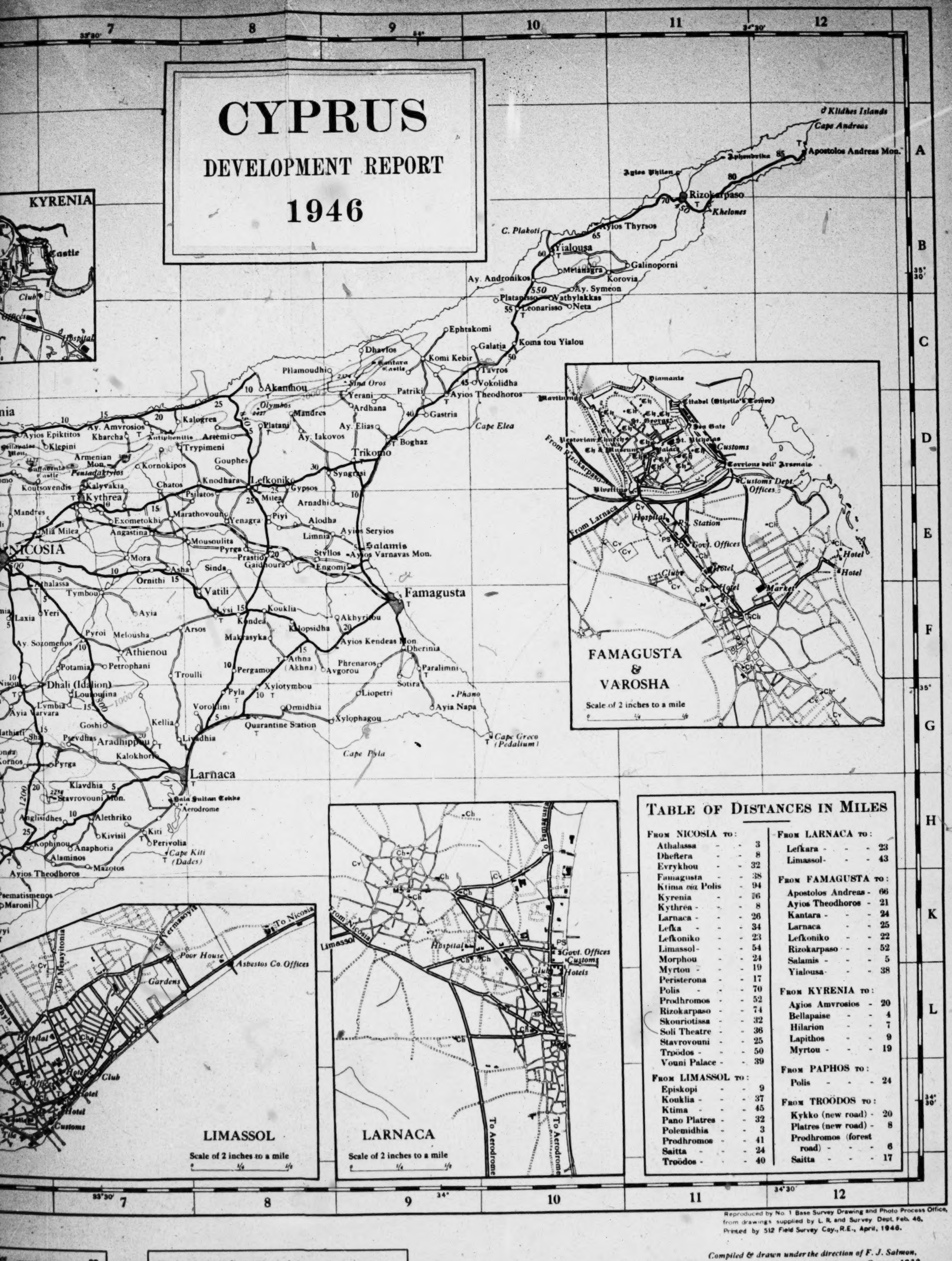
On the town insets the principal motor routes are shown in bold lines; asphalted roads are not distinguished.

Road information is not guaranteed as conditions are liable to change.
No hill on the principal roads exceeds a gradient of 1 in 12.

Layers at 1000 ft. interval from very approximate contours

To avoid confusion many villages & streams have been omitted

The conventional reference grids, 8 miles by 12, are numbered & lettered in the margin & follow the sheet lines of the 2 inch series



KYRENIA
Castle
Club
Hospital
NICOSIA
Famagusta
Larnaca
Salamis
Rizokarpaso
Apostolos Andreas Mon.
Cape Andreas
Kleidhes Islands
C. Plakoti
Cape Elea
Cape Greco (Pedalium)
Cape Pyla
Cape Kiti (Dades)
Aerodrome
Quarantine Station
FAMAGUSTA & VAROSHA
Scale of 2 inches to a mile
LIMASSOL
Scale of 2 inches to a mile
LARNACA
Scale of 2 inches to a mile
To Aerodrome
From Nicosia
To Nicosia
A
B
C
D
E
F
G
H
K
L
7
8
9
10
11
12
33°30'
34°
34°30'
35°
35°30'

CYPRUS

DEVELOPMENT REPORT

1946

Table of Distances in Miles

From NICOSIA to:	
Athalassa	3
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Morphou	24
Myrtou	19
Peristerona	17
Polis	70
Prodhromos	52
Rizokarpaso	74
Skouriotissa	32
Soli Theatre	36
Stavrovouni	25
Troödos	50
Vouni Palace	39

From LIMASSOL to:	
Episkopi	9
Kouklia	37
Ktima	45
Pano Platres	32
Polemidhia	3
Prodhromos	41
Saitta	24
Troödos	40

From LARNACA to:	
Lefkara	23
Limassol	43

From FAMAGUSTA to:	
Apostolos Andreas	66
Ayios Theodhoros	21
Kantara	24
Larnaca	25
Lefkoniko	22
Rizokarpaso	52
Salamis	5
Yialousa	38

From KYRENIA to:	
Ayios Amvrosios	20
Bellapaise	4
Hilarion	7
Lapithos	9
Myrtou	19

From PAPHOS to:	
Polis	24

From TROÖDOS to:	
Kykko (new road)	20
Platres (new road)	8
Prodhromos (forest road)	6
Saitta	17

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Heights of principal mountains in feet .... ▲2380
Approximate heights of localities & principal passes 2563
Layers at 1000 ft: interval from very approximate contours

To avoid confusion many villages & streams have been omitted

The conventional reference grids, 8 miles by 12, are numbered &

Compiled & drawn under the direction of F. J. Salmon,
Director of Land Registration & Surveys, Cyprus, 1932
Fourth Edition 1946